

UNC-CH HEALTH SCIENCES LIBRARY



H00352078P

The Library
of the
University of North Carolina



Endowed by The Dialectic
and
Philanthropic Societies

614.06
N86h
v.28-30
1913-16

Med. lib.

*This book must not
be taken from the
Library building.*

LUNC-15M N.36
OP-13370

BETTER BABIES SPECIAL

WEEKS
COLLECTION



The Health Bulletin

Published by THE NORTH CAROLINA STATE BOARD OF HEALTH

This Bulletin will be sent free to any citizen of the State upon request.

*Published Monthly at the Office of the Secretary of the Board, Raleigh, N. C.
Entered as second-class matter at Post Office at Raleigh, N. C., under Act of July 16, 1894.*

Vol. XXVIII.

SEPTEMBER, 1913.

No. 6.



COLORADO PRIZE WINNERS, 1912.

Watch this page for the North Carolina Champions, after the State Fair.

CONTENTS

HEALTH AND PUBLIC HEALTH BREVITIES	99
BETTER BABIES IN NORTH CAROLINA	100
WATCH YOUR NURSEMAIDS	104
WE WANT TO HELP YOU	104
FEEDING SICK BABIES	105
HOW ASHEVILLE DOES IT	106
GOOD WELL WATER	107
MOSQUITO WARFARE IN PANAMA	109
THE CARE OF MILK IN THE HOME	111
WHAT BERLIN DID, WE CAN DO	112
THE LAST WORD	112

FREE PUBLIC HEALTH LITERATURE

The State Board of Health has a limited quantity of health literature on the subjects listed below, which will be sent out, free of charge, to any citizen of the State as long as the supply lasts. If you care for any of this literature, or want some sent to a friend, just write to the State Board of Health, at Raleigh. A post-card will bring it by return mail.

- No. 9. Medical Inspection of Schools and School Children.
- No. 10. Care and Feeding of Babies.
- No. 11. The Plague of Flies and Mosquitoes.
- No. 12. Residential Sewage Disposal Plants.
- No. 13. Sanitary Privy.
- No. 14. Hookworm Disease.
- No. 15. Malaria.
- No. 18. Tuberculosis Leaflet.
- No. 19. Compilation of Public Health Laws of North Carolina.
- No. 20. Tuberculosis Bulletin.
- No. 21. Fly Leaflet.
- No. 22. Baby Leaflet.
- No. 23. The Vital Statistics Law.
- No. 27. The Whole-time County Health Officer.
- Anti-Spitting Placards (11 inches by 9 inches).
- Anti-Fly Placards (11 inches by 19 inches).

THE Health Bulletin



PUBLISHED BY THE NORTH CAROLINA STATE BOARD OF HEALTH

J. HOWELL WAY, M.D., *President*, Waynesville.

RICHARD H. LEWIS, M.D., Raleigh.

J. L. LUDLOW, C.E., Winston-Salem.

W. O. SPENCER, M.D., Winston-Salem.

THOMAS E. ANDERSON, M.D., Statesville.

CHARLES O'H. LAUGHINGHOUSE, M.D.,
Greenville.

EDWARD J. WOOD, M.D., Wilmington.

A. A. KENT, M.D., Lenoir.

CYRUS THOMPSON, M.D., Jacksonville.

W. S. RANKIN, M.D., *Secretary and Treasurer*, Raleigh.

Vol. XXVIII.

SEPTEMBER, 1913.

No. 6.

HEALTH AND PUBLIC HEALTH BREVITIES.

Don't miss the BETTER BABIES CONTEST at the State Fair.

—o—

To get some good, first-class health literature free, see the opposite page.

—o—

Over \$300 in prizes for the best North Carolina babies at the Fair. Enter your baby. There are no entry fees.

—o—

For the elementary principles of health and sanitation on the farm, see the public health exhibit at the State Fair, October 20th to 25th.

—o—

The BETTER BABIES CONTEST and the PUBLIC HEALTH EXHIBIT will be two of the biggest features of the State Fair this year.

—o—

Thirty-three states make tuberculosis a reportable disease. Isn't it about time for North Carolina to join the procession?

—o—

The liveliest thing at the State Fair—the BETTER BABIES CONTEST. Don't miss it. It will beat the Midway any day—and it's free.

—o—

August and September form low water-mark for pneumonia. From September on to February the pneumonia death rate goes up—because our windows go down. Live, work, and sleep in the fresh air, and avoid pneumonia, colds, grip, and tuberculosis.

On dressing for hot weather, the Chicago Health Department says: "Wear as little clothing as the law of the land will permit—that's mighty little these days. 'Equal rights for men.'"

—o—

Would you like to know if your child has hookworms? The State Board of Health will tell you free. Write them, stating that you want a specimen container for hookworm examination.

—o—

Any one suspecting tuberculosis should consult his family doctor at once. If thought necessary, the doctor can have a sample of sputum examined for tuberculosis germs at the State Laboratory of Hygiene free of charge.

—o—

True civilization and refinement in a town, community, or individual family can be judged very closely by the way they handle their own filth. If they have the antiquated, open, insanitary privies, or no privies at all, and no screen doors or windows, they are about at the bottom of the scale. If they have screen doors and windows, they have moved up quite a bit; and if they have abolished privies altogether, or use sanitary privies and screens at their doors, they have passed the selfish stage and recognize that they are their brother's keeper. Where are you on this scale?

BETTER BABIES IN NORTH CAROLINA.

Each Year the Old North State Raises Better Cotton, Better Tobacco, Better Horses, and Better Cattle—and Why Not Better Babies?

WARREN H. BOOKER, C.E., Assistant Secretary.

North Carolina neglects her best crop. Yes, just that. Every year we have our county and state fairs; we have our Agricultural Department with scores of experts, test farms and experiment stations, and our agricultural colleges filled to overflowing; we have our farmers' institutes, and the best farm paper in the United States. We have all these, and why? In order to make two bales of cotton grow on an acre that formerly produced but one; in order to produce good cattle instead of scalawags, and thoroughbred Berkshires and Poland-Chinas instead of razorbacks and elm peelers.

But North Carolina's best crop is never mentioned. No one ever dreamed of holding institutes to teach fathers and mothers how to raise better, healthier babies. We have no schools or colleges teaching such subjects. We have no papers or magazines on this subject. In fact, all we have ever done was to have an occasional beauty show at the fair. That was a joke. No one ever knew a thing more about how to raise a better, healthier baby, or how to improve those they already had,

after attending such a beauty show, than they did before.

Now, all this is going to be changed. The North Carolina mothers have said so; the State Fair Association has said



Broad, Deep Chests Are Fine, But—

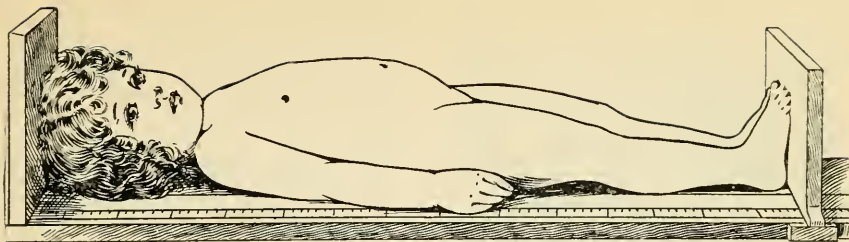
so; and the State Board of Health is going to back them up and coöperate with the mothers of the State and with the State Fair Association, and hold North Carolina's first great BETTER BABIES CONTEST at the State Fair in October.

OVER \$300 IN CASH PRIZES.

The contest will be under the direct management and control of the State Board of Health. It will not be a beauty show in any sense of the word. It will be a health contest, out and out. Neither grandfathers nor grandmothers, town mayors, congressmen nor politicians will be allowed to pat babies' dimples, kiss them on the mouth, or vote for the prettiest child. On the other hand, a corps of the best doctors and children's specialists in the State will be on hand to score the babies on a score-card in much the same way as the horsemen and cattle judges will



A Sound Chest is a Valuable Asset.



GETTING THE CORRECT HEIGHT.

Height and Weight Should Conform With Age.



They Must Not be Flat or Pigeon-breasted.

score the horses and cattle. The baby's age will be noted, then he will be weighed, measured, and carefully examined, and, above all things else, these doctors will point out to the mothers and fathers just what goes to make a perfect baby. They will show why the baby scores high here and low there, and just how to remedy any defects.

Then, best of all, there will be the prizes. Of course, the prize for the best baby will not be so large this year as it will be for the best horse or cow or hog. One could scarcely expect that the first year; but next year, when North Carolinians begin to appreciate that a third or fourth prize baby is worth more than the best race-horse on the track, the adjustment of prizes will be different. This year the *Woman's Home Companion* offered \$100, provided the State Fair Association would raise \$100, and provided further that the women's clubs of the State would raise

\$50. It took quite a bit of work to raise this \$150 in order to secure the \$100, but the State Board of Health did not stop there. It went on, and is still collecting funds for prizes, and before the contest is held it hopes to have a considerably larger fund for this purpose.

JUDGING THE BABIES.

Lots of interest centers around just how the babies will be judged or scored. Space will not permit us to explain the whole matter in detail, but the general plan will be as follows:

The contest will be held October 20th to 25th, at the State Fair Grounds at Raleigh, in the east wing of Floral Hall. At the appointed day and hour the mother will bring the baby to the large, comfortable reception room, where a reception committee of ladies interested in the babies and their mothers will meet the babies, learn the name, age, and sex of each one, and fill out



Surveying Osler's "Mason and Dixon Line."



A Perfect Baby Must be Well Proportioned as to Height, Length of Arms, and Length of Legs.

the score-card showing these facts, also the name and address of the father and mother, whether the baby has been breast-fed or bottle-fed, whether or not it sleeps alone, whether or not it sleeps in a room with windows open, etc.

From the reception room the baby and mother will enter a quiet room where a doctor will test the child mentally according to its age. For instance, a child of six months should sit alone, play with simple objects like a pencil or spoon, look in the direction of unexpected noises, etc., while a child of two years should run, join words to make short sentences, be able to point to eyes, nose, ears, etc., and so on. If baby meets all these conditions, he will be scored 100, or perfect.

WEIGHTS AND MEASURES.

From the mental test room the mother and baby will be conducted to a measuring room. Here a doctor and a trained nurse will carefully weigh and measure the baby. A table of standards has already been provided for babies of different ages. Baby's height will be measured, and his chest measurements and other measurements taken, and he will be graded accordingly.

PHYSICAL EXAMINATION.

From the weighing and measuring room the mother and child will be taken

to the last examination room. Here trained specialists will make careful physical examinations of the baby from head to foot. They will examine his teeth, his eyes, ears, nose, throat, and every possible detail that goes to make up a perfectly healthy, normal baby. Furthermore, these medical experts will point out to fathers and mothers any physical defects or tendencies, and inform them, free of charge, how to remedy or overcome these defects by proper care of the baby.

PUBLIC HEALTH EXHIBIT.

Nor is that all. For the first time in its history, the State Board of Health will hold a public health exhibit, showing the most approved forms of sanitation so far as the care of babies is concerned. There will also be a general exhibit on a lot of other public health subjects, such as tuberculosis, typhoid, malaria, hookworm disease, etc. The Board will devote a considerable amount of time, money, and energy to getting up the best public health exhibit ever shown in this State, if not in the South. The opportunity of studying the cheap, practical, home-made models of every-day sanitation will be well worth a trip to the Fair, to say nothing of the other features. The object of the exhibit will be to



Better Babies Must Have Good Underpinning. They Have a Long Road to Travel.

bring modern sanitation down to practical, every-day life. Don't miss it. It will be next to the Better Babies Contest.

ABOUT THE PRIZES.

The matter of prizes has not been fully decided as yet. There will be classes for rural babies and city babies, and these classes will probably also be arranged according to ages, say from six months to twenty-four months, and from twenty-four months to thirty-six months. The classes will probably also be divided into classes for boys and classes for girls. There will probably also be sweepstakes and special prizes for the best boy and the best girl of any class. In each class there will probably be a first, second, third, and fourth prize. A special committee will decide later in regard to the number and value of the prizes, and due announcement will be made in the next number of *THE HEALTH BULLETIN*.

Every effort is being made to make the Better Babies Contest as pleasant and comfortable for the babies and their parents as possible. Besides the large reception room, the Board will endeavor to have tents erected for rest rooms for mothers and babies. Cots



Sore or Swollen "Kernels" May Indicate a Disposition to Contract Disease.

will be provided for sleepy babies, and trained nurses will be left in charge of the babies while the mothers go about seeing the rest of the Fair.

HOW TO ENTER.

Parents wishing to enter their babies in the contest will file their application with the State Board of Health before October 15th—the earlier the better. No charge or entry fee will be required. The parents will also state the day on which they expect to attend the Fair, so that the Board can arrange a convenient hour for the judges and the baby.

Remember that Wednesday will probably be a better day than Thursday or Friday, and Tuesday will probably be the best day of all, so far as convenience and the comfort of the baby is concerned.

Applications for entry will be filed in order, and preference in regard to time of examinations will be given early applicants. For this reason it is best to make your entry application early, even though you should later find it impossible to have the baby there. Applications are already coming in, and if you make your entry application at once, so much the better.



Good Teeth, Good Tonsils, and a Clean Tongue Make for Better Babies.

The frontispiece of this BULLETIN and the cuts illustrating this article are used by courtesy *Womans' Home Companion*.

WATCH YOUR NURSEMAIDS.

WARREN H. BOOKER, C.E., Assistant Secretary.

Nursemaids are a very potent health factor in child life. Children's diseases are frequently conveyed by them, and sometimes diseases more far-reaching are directly chargeable to ignorant, careless, or diseased nurses. This is particularly true in the South, where colored women do much of the nursing.

Perhaps the only reason we do not have more crimes of preventable diseases charged up to careless, ignorant, or diseased nurses is that, as a rule, it is very hard to determine the exact source, cause, or occasion wherein a case of preventable sickness was contracted. In May, 1912, however, in a large children's home, a nurse having tuberculosis was given charge of a ward of ten small infants ranging from two to four years of age. All ten of these children had been tested for tuberculosis the month before this nursemaid took charge, and it was then found that three out of the ten had been previously infected with tuberculosis, but were not in an active stage of the disease at that time.

It was noticed within six weeks after employing this nurse that she had tuberculosis, and she was promptly removed on the first of July, and the children again examined, but only the same three responded to the test. Three months later, however, the children were again examined, and it was

found at that time that tubercular infection had developed sufficiently in every case to be recognized by the tuberculin test. These children could not have contracted tuberculosis from any one else except the tuberculous nursemaid, as she was the only person that came in contact with them. Even their milk supply was Pasteurized by heating to 145° F. for 45 minutes to kill any tubercular infection from the cows.

It should be noted that there were nearly three hundred children in this institution, and it was found that this was the only tuberculous nurse present. It was also found that the children under this particular nurse were the only ones to develop tubercular infection after coming to the institution. All this goes to show the grave danger of infecting our children by means of nursemaids.

Fortunately, these early tubercular infections are, as a rule, readily overcome by children, but not always, as is shown by the records of deaths from tuberculosis among children. The lesson to be borne in mind is the possibility and the danger of having our little ones and our loved ones infected by a race of people having three times the amount of tuberculosis that white people have, as well as a great excess of certain other preventable diseases, to say nothing of the loathsome venereal diseases.

WE WANT TO HELP YOU.

WARREN H. BOOKER, C.E., Assistant Secretary.

Miss Teacher, Mrs. Club Woman, Messrs. Preachers and all other Public-Spirited Citizens, we want to help you. Will you let us?

Here is one way in which the State Board of Health can help you in your school, church, and community work. We have just secured two sets of lantern slides, with lectures already writ-

ten out to accompany them. One of the lectures is on tuberculosis and is well adapted for any mixed audience, while the other lecture is on the general subject of health, the teeth, voice, hearing, and sight. It is especially adapted for schools, and for work on the medical inspection of school children.

Any one can "deliver" or read one of

these stock lectures while some one else operates the slides in any ordinary stereopticon lantern.

The State Board of Health offers to loan these slides and lectures free of charge to any school, church, club, organization, or public-spirited citizen who will agree to give a lecture from them, provided they pay the express charges to their town. Then they may hold the slides and lecture until we send them an order requesting that they be shipped to some one else.

Besides the slides and lectures, this Board will also send you special bulletins to help you get posted on the subject on which you expect to lecture, and a limited quantity of various kinds of public health leaflets which may be distributed among the audience after the lecture.

Here is a golden opportunity for any one at all interested in giving his club, church, or community an entertaining and instructive lecture.

Our church people are beginning to have more compassion on their overworked preachers, and are giving them more generous vacations. Laymen who relieve the regular minister should find these lectures an excellent method of continuing the regular meetings. Health work, after all, is only one

phase of Christian activity, and if the lecturer wants to add more religion to his lecture, let him draw lessons from the life of the Great Physician, or let him teach modern sanitation from the Book of Deuteronomy.

Doctors usually make excellent people to deliver such lectures. However, on account of the delicacy of medical ethics and on account of the difficulty in getting a good audience to an ordinary lecture, doctors thus far have not, as a rule, volunteered to give health lectures as freely as they might. But if some church, school, or public-spirited citizen will invite a doctor to give one of these illustrated lectures there will be little danger of his not accepting the invitation. Try it once.

To secure these slides and lectures, write the State Board of Health, Raleigh. Do not announce the date for a lecture until you find out when you can get the slides.

If the idea proves popular, the Board will be glad to add several more sets of slides and lectures on different subjects, and possibly for those communities not having ready access to stereopticon lanterns the Board may later secure one or more traveling lanterns to loan out with the slides. Let us know how the idea appeals to you.

FEEDING SICK BABIES.

If it were possible to obtain an accurate record of baby sickness, it would be found that many babies get sick in June and the early part of July, though the baby death rate does not begin to show much rise until after the middle of the latter month.

The asylums, sanitarium, hospitals, and baby tents find that the children who are severely sick in midsummer give a history of mild sickness in the early summer. It is the old, old story of the "stitch in time saving nine."

Loose bowels, green stools, mucus, and blood cannot be neglected with any degree of safety after June 15th in this climate and June 1st in warmer climates. The child may seem to be happy, not upset by the little indigestion, and it may seem useless to worry about so trifling a matter. But, unless these trifles are attended to, things will get worse as the weather gets hotter, and, presently, the baby is in a condition where no food seems to agree with it and no doctor seems to help it. The

mother must carry on her long, weary fight to keep the poor, skinny baby alive until the nights get cool in October.

—o—

The first thing to do when the baby gets sick is to stop feeding it. Probably the milk is bad anyhow. But, whether it be good or bad, it will disagree with a sick baby. In place of milk the baby should take clean water from a clean bottle or a clean cup. If the trouble keeps up there are milk substitutes which can be given until it is safe to give milk again. The physician or nurse will demonstrate how these are made.

The next step, after stopping the food, is to empty the child's intestines of all fermenting, decomposing food. The parent is justified in going as far in this line as the use of oil by the mouth and of simple enemas by injection. If relief does not come when these have

acted, the mother is not justified in going further. She should get help from a physician or nurse. Caring for a sick baby is so largely "doing and showing," as contrasted with "telling," that a nurse is needed more than would usually be the case.

—o—

As the child goes back on milk, let it be watered milk or good buttermilk. If the first feeding agrees, let the next be slightly less watered, and the next still less, until within a few days the diet is one proper for the age and the season of the year. Occasionally a mother continues to give watery milk after the acute trouble has subsided and the baby in a few weeks shows signs of starvation.

Remember—a baby with indigestion can be starved by overfeeding. The indigestion passed, it may be starved by underfeeding.—*Dr. W. A. Evans in The Chicago Tribune.*

HOW ASHEVILLE DOES IT.

When a case of typhoid fever occurs in Asheville, the dairyman delivering milk to the afflicted family is immediately notified of the fact. That is usually enough to make the dairyman feel that to some extent his dairy is charged up with the case, until it is proven that no further cases occur on his route or that the first case was due to something else.

Furthermore, the dairyman is not allowed to remove milk bottles from the premises of the sick person until the

bottles have been sterilized by the health department. This is a very wise provision, because typhoid germs grow very rapidly in milk, and if the milk bottle should become accidentally contaminated with typhoid germs in the typhoid-stricken home the dairyman might contaminate his other bottles and cans in the course of ordinary washing and spread the disease to the rest of his customers. This is a very good precaution. What is the policy of your town in this matter?—W. H. B.

Jesus was rebuked in the elder day for healing an infirm man on the Sabbath. And those who rebuked Him thought it perfectly all right to save a sheep on the Sabbath. The sheep was a piece of property. It was money, it was value. "How much better is a man than a sheep?" He asked, and the doctors, the reformers, the cranks, have been thundering that to the multitude

ever since, and the multitude has begun to listen. Within our own day, we have seen legislatures appropriate more for hog serum than for tuberculosis, more for the hog than for the human; but a man is getting to be worth as much as a hog in this State, and he is going to be worth more.—*W. T. Bost in The News and Observer.*

GOOD WELL WATER.

WARREN H. BOOKER, C.E., Assistant Secretary.

Good, wholesome drinking-water is a fundamental of life and health. Judging from analyses of private well water at the State Laboratory of Hygiene, one would think good well water was a luxury in North Carolina. Only 17 per cent. or one out of six, of all the hundreds of ordinary, open-top bucket wells were found to furnish water safe for drinking. Of the wells with pumps it was found that 63 per cent. or four times as many, furnished water fit for human use. Only about 36 per cent of the private spring supplies are found safe. All this is an unfortunate, dangerous, and disgraceful condition, particularly among our rural folk. A great deal of this trouble can be easily avoided by observing the following precautions.

The purity of a water is a very deceiving thing. We can frequently tell whether or not food is wholesome by looking at it, by smelling it, or tasting it; but not so with water. Looks, taste, and smell count for little. Water laden with germs of typhoid, cholera, or diarrheal diseases may be perfectly clear, tasteless, and odorless. The only way to tell bad water is to have a chemical and bacterial examination made of it, giving the person examining the water all the information available as to how, when, and where the sample was collected, and a description of the surroundings of the well or spring. The distance from privies, stables, etc., should be given, also the direction of the surface drainage with reference to the well, and the method of covering and protecting the top of the well.

What most of us are interested in is how to get a well of good, wholesome water, and then keep it good. Because a well water is wholesome to-day is no reason why it may not be dangerously polluted next month or next year. A well once polluted is always uncertain. The water may become pure or it may continue impure. It is like a person

that steals. If he steals once, it is doubtful if he ever permanently reforms, and we are always uneasy lest he commit a robbery.

A GOOD WELL LOCATION.

In locating a well use common sense and foresight. Don't rely on superstitions; they may kill some one with bad water. Ordinarily, the water in the ground moves slowly in a direction from higher ground toward lower ground; so be careful not to locate a well so that the water coming to it will have soaked through barnyard manure or privy filth above the well. Wells should, whenever possible, be located on high ground, well away from privies, hogpens, and barnyards. Wells located on high ground usually have to be put down somewhat deeper than wells located on low ground, but the quality of the water from the wells on high ground will justify the extra expense.

Use foresight and do not locate a well where it may later become polluted by privies or other sources of pollution not under your control.

Never locate a well where the heaviest kind of a rain or even a "cloud-burst" can wash surface material from the ground into the top of the well. If there is any possibility of such a thing happening, grade around the top of the well so that rain and surface water will drain 20 or 30 feet away from the well—the farther the better. This is very important.

Never use an open-top well. They are many times more liable to contamination than wells with pumps. Pumps, either wooden or iron, never injure the quality of the water or the health of the users. The more you protect the top of the well, the better. Note in the accompanying illustration how the walls are laid up with cement joints. The top of the well is carefully covered, cement is packed around the top of the well, a trough and drain pre-

vents waste water from returning to the well, and all surface water is drained away from the well by the slope of the ground. This is an excellent form of well, and if privies, hog-pens, etc., are kept away from it and on lower ground, it should give excellent water.

IMPROVING BAD WELLS.

To make a good well out of a bad one is a very hard and uncertain job. It is usually cheaper to locate a new well and begin all over. Sometimes, by making the walls water-tight, grading the surface of the ground away from the well, placing a tight cover over the well, using a pump, draining the waste water away, and removing all sources of pollution, the water may be improved; but the results cannot be guaranteed.

PROTECTING SPRINGS.

The same general principles apply to springs that apply to wells, except that, as a rule, springs are already located, and we have to leave them where they are and protect them as best we can.

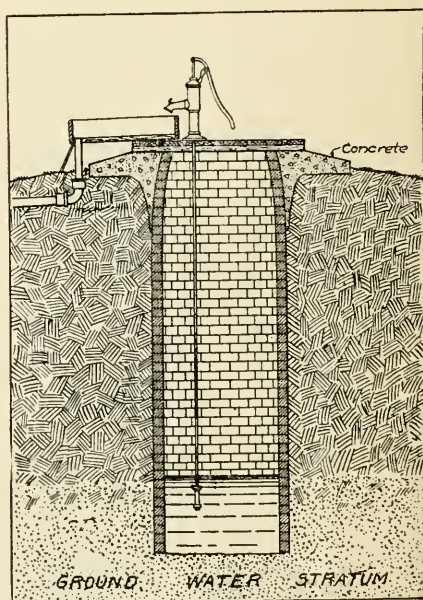
An excellent way to protect a spring is to surround it with a cement bowl or basin and cover it with some close-fitting lid. This will exclude frogs and bugs, and also leaves and other debris frequently blown into open springs.

If possible, the water from the spring should be piped down to the house direct. If this cannot be done, an iron pipe or terra-cotta pipe should discharge the overflow from the spring so that it can be caught in pails, etc. In this way promiscuous dipping of cups and pails into the spring bowl itself can be avoided.

To protect a spring from surface drainage, it is an excellent plan to cut a small ditch around the spring on its upper side at a distance of some 20 or 30 feet, and drain the surface wash away from the spring. Live stock should not be allowed to pasture for a distance of at least 100 feet above the spring, and privies should be kept en-

tirely off the catchment area of small springs. In the case of large springs, possible sources of pollution should, as a general rule, not be allowed within 500 feet above the spring. Ground above a spring or around a well, if used for farming, should not be fertilized with barnyard manure, etc., if for no other than esthetic reasons.

No definite rule can be laid down as to a safe distance from a source of pollution to a well or spring. In sandy and clayey soils there is less danger than where rocks, more or less cracked and seamy, exist a few feet under the surface. The safest rule is to keep all sources of pollution as far away as possible, the farther the better, and under no circumstances permit them to exist within one hundred feet of even a carefully protected well such as shown in the illustration.



A GOOD FORM FOR A DUG WELL.

Protected from Surface Pollution by a Good Cover, Well Laid Wall, and a Trough Which Drains the Waste Water Away. Note Also the Concrete Around the Top, and the Direction of Surface Drainage.

MOSQUITO WARFARE IN PANAMA.

How They Fight Mosquitoes to Save Human Lives.

DR. W. S. RANKIN, Secretary.

The Isthmus of Panama has seen two great battles. Thirty years ago, when the French started the Canal, the mosquitoes undertook to drive out the invaders, and they did it. The death rate among the French was 240 per 1,000 annually—a clear-cut victory for the mosquito. To-day, while the Americans are digging the Canal, they are also making war on the mosquito, and the mosquito is losing. The present death rate is only 14 per 1,000. We can appreciate this better when we remember that the death rate in North Carolina is about 30 per cent higher, or something over 18 per 1,000.

Methods used in controlling the mosquito problem consist of filling and draining collections of stagnant water; oiling and using larvicide where filling and draining cannot be employed; in screening; in catching mosquitoes by hand and by traps; and in persuading people subjected to bites of mosquitoes to use small doses of quinine daily. Three to five grains daily will prevent malaria in a malarial district.

The most permanent method of controlling mosquitoes is the filling or drainage of stagnant water. This method attacks the problem from its very source. It prevents the breeding of the mosquito. To fill up a swamp is better than to drain it, but much more expensive. After drainage the ditches must be kept open and free from grasses, and oiled frequently. The cutting and removal of grass from the ditches in the tropics is no small part of the mosquito problem.

Where filling in or drainage cannot be employed, then the only thing to do is to oil the surface of the water, or to treat it with some chemical larvicide that will kill the young mosqui-

toes. In the tropics they use a cheap crude oil, which is much better for this purpose than ordinary kerosene oil.

METHODS OF OILING.

Many interesting ways of applying oil to water have been devised in the Canal Zone. It is applied in some places by men with a spraying apparatus fastened on their backs, knapsack fashion; in other places, where the ground is not too soft for the wheels to leave a track in which stagnant water could accumulate, it is applied by an oil cart with a mule hitched to it and a spraying arrangement attached to the tank on the oil cart. Oil is applied to the water in small streams and ditches by placing barrels or garbage cans along the course of the stream, the number and distance apart of the barrels and garbage cans depending upon the volume of the stream. By fixing a spigot in the barrels, the oil is allowed to fall on the water drop by drop in such quantities as needed. Where the amount of water is very small, as that coming from an ooze on a hillside, they dip a small roll of cotton waste in the oil and fasten it on the ground over the ooze.

Where conditions of travel make it difficult to carry the large amounts of oil needed, a chemical composed of crude, cheap, carbolic acid, rosin, and caustic soda, mixed together, and known as larvicide, is sprayed upon the stagnant water. The larvicide is very fatal to the young forms of mosquitoes, and as it can be used in much smaller quantities than the oil, it is more convenient where conditions of travel make the oiling inconvenient.

An important thing that impresses one in studying the treatment of stagnant

water in the tropics by the various methods mentioned is the fact that no stagnant water, not even small collections on a hillside a fourth or an eighth of an inch deep, nor even the water in a sheep's track, is neglected. The treatment is complete, and this is one of the important points that the authorities in the Zone make in dealing with the mosquito problem.

VALUE OF SCREENS.

If mosquitoes are allowed to breed, the malarial death rate can be held down remarkably low by thoroughly screening all houses and by catching mosquitoes by hand and by traps. The occurrence of malaria in the screened section and unscreened section of the same settlement, both sections of which are equally exposed to the mosquitoes, has demonstrated that there is one-third less malaria in screened than in unscreened houses. The authorities of the Zone stress the point that screening should not be done unless it is done thoroughly. An imperfectly screened house frequently serves to admit and retain the mosquitoes, acting as a trap. In screening, an 18-mesh copper wire is used; a larger mesh will admit of the entrance of certain varieties of mosquitoes.

The authorities of the Canal Zone think a great deal of catching the mosquito. Mosquitoes are caught in two ways: Wire traps, very much like some forms of fly traps, are fastened over the transoms of the doors. To catch the mosquitoes entering the house, the convex part of the trap is turned in; to catch the mosquitoes leaving the house the position of the trap is reversed. A still more important way than trapping, in catching the mosquitoes that reach a dwelling, is by the "hand catch." "Hand catching" as carried out in the Canal Zone is

done by ordinary day laborers. The mosquitoes are looked for early in the morning, when they are usually found on the wire screens trying to get out, or late in the day in the dark corners of the rooms, under shelving, or behind pictures. The mosquito catcher carries a little bicycle lamp and a cylindrical bottle, about 4 inches deep by an inch in diameter, with a little piece of cotton in the bottom soaked with chloroform. With the rays of the light thrown in the dark place he spies the mosquito on the wall and gradually slips the mouth of the bottle over the insect, which soon becomes anesthetized and falls into the bottle. In some of the temporary camps, where filling in and draining are too expensive, it has been possible to hold the malarial death rate down to the average prevalence in the Canal Zone by the "hand catch" method. This demonstrates the importance of this measure in controlling the malarial problem. About ten times as many mosquitoes are caught by hand as by traps.

The effect of the mosquito work in the Canal Zone has been to entirely eradicate yellow fever, the last case of which occurred in 1906, and to reduce malaria 90 per cent.

As will be apparent to our readers, many of the methods used in the Canal Zone are applicable to North Carolina, and many of the methods used by the Canal Zone can be used by the individual for his own and his family's protection, independently of the indifference of the municipality in which he lives to the importance of mosquito eradication. There are over 500 deaths and 65,000 to 75,000 cases of malaria every year in North Carolina, nine-tenths of which occur in the eastern half of the State. It is evident that it is time for our people to begin to take an interest in the mosquito and malaria.

THE CARE OF MILK IN THE HOME.

Milk is a perishable food. The length of time it remains sweet depends largely upon the care it receives after delivery to the consumer. Keep it clean, cool, and covered, and it should remain sweet during the 24 hours in which it should be used.

Germs, to grow, require three important things, namely: food, moisture, and moderate heat. Milk furnishes food and moisture and the room air furnishes the necessary warmth. Milk is therefore a very good medium for the growth of germs, if not kept cold.

Dust, dirt, and flies are the carriers through which germs get into milk. Milk, therefore, should be protected from dust, dirt, and flies.

Remember: the most important rule about the care of milk is: *keep the milk clean, keep it cold, and keep it covered.*

Do not allow milk to stand on the dumbwaiter, stoop, window-sill, or other place where the driver leaves it. Place it promptly in the ice box.

Keep your ice box cold and well stocked with ice. You cannot obtain good refrigeration without a well-filled ice compartment.

Keep your refrigerator clean and free from disagreeable odors. Milk absorbs unpleasant odors very readily. Strong smelling foods, such as onions, garlic, and strong cheeses, should not be kept in the same compartment with milk, butter, or cream.

Where ice boxes are not available, some makeshift arrangement should be provided. The following has been recommended:

"An emergency ice box may be constructed by placing a piece of ice in a covered tin pail or bucket having a hole in the bottom. An old leaky pail will answer.

"Place the bottles of milk in direct contact with the ice, and cover the whole with a heavy cloth or blanket. The pail may be kept in the sink."

Milk purchased from stores should be delivered in a clean condition and at or below 50 degrees F.

Keep the milk prepared for infant feeding in nursery bottles in the ice box until just before using. The practice of heating the baby's milk at evening and keeping it warm until the night or early morning feeding is very bad. The heat thus maintained is most favorable to the growth of germs.

Return promptly to the ice box any unused portion of milk. Standing in the warm room will greatly hasten the growth of germs. Keep the milk tightly covered, so that dust, dirt, and flies may not enter.

Wipe the mouth of the bottle carefully with a clean towel before removing the cap. Replace the cap immediately after pouring out what milk is wanted.

Pour the milk into clean receptacles. Dirty vessels will as readily contaminate the milk as will dust, dirt, and flies.

Place milk dipped from cans or tanks only in clean covered pails or other covered receptacles.

Mix the milk well before using. Inverting the bottle rapidly two or three times will accomplish this. Cream separates and rises to the top, making this necessary.

Pour only enough milk from the bottle for the specific use. Do *not* put any unused portion back with the milk from which it was taken, but place it in the ice box in another covered vessel.

Do not keep more than one day's supply of milk at a time. *Order a fresh supply daily.*

As a matter of courtesy, at least, consumers should wash the milk bottles before returning them to the dealer. In some towns this is required by law. The proper way to wash a milk bottle is to first rinse it thoroughly with cold water. When all the milky

film has been removed from the inside, then wash carefully with very hot water. All vessels used for holding milk or cream should be cleansed in the same manner.

Do not use milk bottles for any other purpose than the holding of milk or cream.

Rinse nursery bottles and nipples in cold water and wash in boiling water

immediately after each feeding. Turn the nipple inside out and thoroughly cleanse. Rinse the bottles and nipples again in boiling water before using.

Remember, above all things, to *keep the milk clean, keep it cold, and keep it covered.*

(From circular issued by the New York Sanitary Milk Dealers' Association.)

WHAT BERLIN DID, WE CAN DO.

The death rate of the city of Berlin, which has a population of over 2,000,000, was 17.95 per 1,000 for 1911. In 1877 it was 35 per 1,000, and for the twenty years preceding that time it had averaged about 36 or 37. It is apparent from these figures that the death rate of Berlin has been cut in half during

the last 34 years, the era coincident with the development of preventive medicine. And yet there are people who are still talking about the "theory of public health." What is more real, more vital, than the *facts* which these figures demonstrate?

THE LAST WORD.

Some one always has to "get in the last word." In formal debates it is the rebuttal speaker. In informal debates it is usually "the woman in the case." In this case it seems to devolve upon the new editor of THE HEALTH BULLETIN. Next month we shall endeavor to let some of our readers "have a say" on this page.

The Secretary of the Board, the former editor of THE BULLETIN, has found that the executive duties of his office and the demands on his time for service outside of the office make it well-nigh impossible for him to find time to do justice to the work of editing this BULLETIN. This duty has fallen to the lot of the Assistant Secretary, who takes up the work with considerable hesitancy and misgiving. Several changes have been made in this issue of THE BULLETIN, and of course we are anxious to know just how our 40,000 readers will like them.

With the next issue we shall en-

deavor to reserve this or a similar space for "Brickbats and Bouquets" from our readers. We want to know just what you want, how you like the changes, and what your ideas are as to the most helpful material to be run in these columns. Of course, we have some ideas of our own, but we want to get in touch with your ideas and see just where we can meet on some common ground and work together with the most efficiency.

For this reason we especially invite criticism of this issue. We want your suggestions. We want to improve this BULLETIN and make it supply the latest information on personal health and public health in a simple, direct, popular form easily understood by the average person who has but little time or inclination to plod through long, hard, dry, technical articles.

In a nutshell, these are our ideas. Now what are your views? Let us hear from you.



The Health Bulletin

COLLECTION

Published by THE NORTH CAROLINA STATE BOARD OF HEALTH

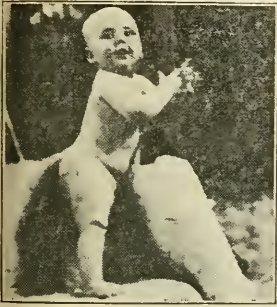
This Bulletin will be sent free to any citizen of the State upon request.

Published monthly at the office of the Secretary of the Board, Raleigh, N. C.
Entered as second-class matter at Postoffice at Raleigh, N. C., under Act of July 16, 1894.

Vol. XXVIII.

OCTOBER, 1913.

No. 7.



Better Babies
from other
Southern States



Watch this page for North Carolina Prize Winners after the State Fair, October 20-25

CONTENTS

BRIEF AND TO THE POINT.....	115
THE BETTER BABIES CONTEST.....	116
NURSING THE BABY.....	119
WHY I AM DOWN ON PATENT MEDICINES.....	120
FREIGHT RATES AND THE REAL ISSUE.....	121
CHRONIC CONSTIPATION	121
CHEAPER SANITATION	124
WHAT IS THE MATTER WITH YOUR STOMACH.....	125
BRICKBATS AND BOUQUETS.....	128

FREE PUBLIC HEALTH LITERATURE

The State Board of Health has a limited quantity of health literature on the subjects listed below, which will be sent out, free of charge to any citizen of the State as long as the supply lasts. If you care for any of this literature, or want some sent to a friend, just write to the State Board of Health, at Raleigh. A post-card will bring it by return mail.

- No. 9. Medical Inspection of Schools and School Children.
- No. 10. Care and Feeding of Babies.
- No. 11. The Plague of Flies and Mosquitoes.
- No. 12. Residential Sewage Disposal Plants.
- No. 13. Sanitary Privy.
- No. 14. Hookworm Disease.
- No. 15. Malaria.
- No. 18. Tuberculosis Leaflet.
- No. 19. Compilation of Public Health Laws of North Carolina.
- No. 20. Tuberculosis Bulletin.
- No. 21. Fly Leaflet.
- No. 22. Baby Leaflet.
- No. 23. The Vital Statistics Law.
- No. 27. The Whole-time County Health Officer.
- Anti-Spitting Placards (11 inches by 9 inches).
- Anti-Fly Placards (11 inches by 19 inches).

THE Health Bulletin

PUBLISHED BY THE NORTH CAROLINA STATE BOARD OF HEALTH

Vol. XXVIII.

OCTOBER, 1913.

No. 7.

BRIEF AND TO THE POINT

It is not the babies born, but the babies saved that count.

—o—

Good morning! Yes, sir, the biggest Better Babies Contest in the State will be held at the State Fair, October 20th to 25th. Be there.

—o—

Babies from some of the best families in the State are being entered at the Better Babies Contest—that's one reason it is called a Better Babies Contest.

—o—

It costs \$1,700 to fire some of Secretary Daniels' big guns. It's a pity a lot of North Carolina counties can't have the price of about two shots to put in a county health officer.

—o—

You don't need to wait for the new law requiring the reporting of tuberculosis to go into effect. If you have tuberculosis or know of anyone that has it, send the name of the patient in to the State Board of Health, and the Board will do all it can for you until the Bureau of Tuberculosis is established.

—o—

The Boy Scouts will assist the Raleigh Nurses' Society in rendering first aid to the sick or injured at the Fair. An army tent will be provided, and the lives, health and comfort of the people will be looked after as never before.

Health is purchasable. Within natural limitations a community can determine its own death rate.

—o—

Have you entered your baby in the Better Babies contest? Better get busy if you want to have any choice in the matter of time to be judged. The schedules are filling up rapidly.

—o—

Right now is a bully good time to start a campaign for a sanitary privy ordinance in your town. Have it go into effect January first, and have no old, open privies in your town next summer.

—o—

Over \$400 in prizes for Better Babies at the State Fair, but that is the least important feature. The information the children's specialists will give the mothers will be worth ten times the value of the prizes.

—o—

If a murderer were slipping up behind you, you would thank some friend for telling you in time to make your escape and reporting the matter to the police, or would you prefer not to be told for fear it would scare you to death? The same thing applies with reference to tuberculosis. If you have tuberculosis, the sooner you are told and the sooner it is reported to the State Board of Health, the more chances you have to make your "get away."

THE BETTER BABIES CONTEST

What it is, How it is Conducted, Prizes Offered, Results Expected and How to Enter.

Last month we announced the Better Babies Contest to be held at the State Fair October 20th to 25th, under the direction of the State Board of Health. This announcement must have been just what our readers were looking for. As soon as the BULLETIN went out applications for entries and inquiries have poured in at an alarming rate. They have been coming from parents, rich and poor, in all stations of life. We have had to make larger arrangements at the fair grounds, arrange for more judges, provide rest tents for tired mothers and sleepy babies, and arrange everything on a larger scale than at first contemplated.

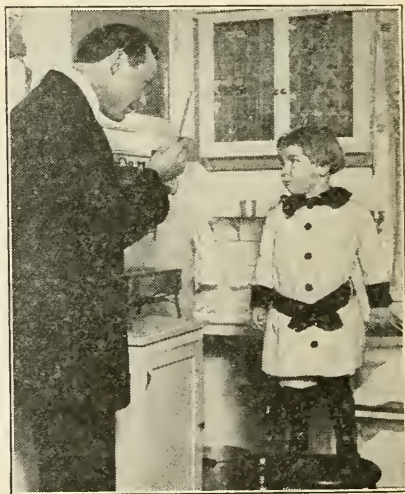
Many inquiries still come in regarding the details of scoring and how the babies are graded. For the benefit of our readers we here give a few extracts from the score card just to give an idea of the nature and scope of the contest.

When the mother and child arrive they will be received by a doctor and a lady from the Reception Committee. The doctor will examine the child for indications of contagious or infectious diseases while the lady will proceed to enroll the child in the contest. Should any babies be found with contagious diseases it will be necessary to exclude them from the contest.

The ladies will explain the object of the contest and any details connected with it. At the same time they will record the child's name, age, sex, weight at birth, whether it is breast fed or bottle fed and on what foods, frequency of feeding, number of teeth, whether or not it sleeps

alone, or with the windows open, as well as the name, age and occupation of father and mother. All this gives the physicians a better understanding of each individual baby.

From the reception room the mother and child pass to the mental test room. In the accompanying cut is shown a two-year-old boy taking a

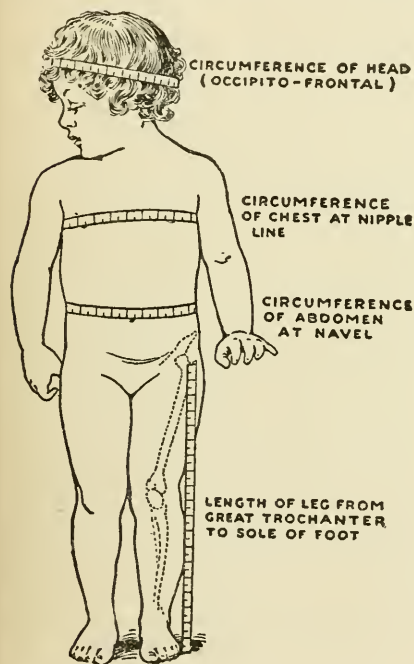


Giving a two year old boy a mental test.

mental test. We cannot give all the tests for the various ages, but as an example of these tests it may be stated that a baby twelve months old should be able to sit alone, stand and walk with a support, should play with toys, listen to the ticking of a watch, look in the direction of unexpected noises, follow moving objects with his eyes. He should also speak a word or two, recognize his mother (shown by crying or uneasiness when taken away from her) play with other children

and be interested in his surroundings. He should *not* be highly nervous, irritable or have an exceeding bad temper. Of course the mental requirements will vary for different ages. This mental test counts 100 points out of a total of 1,000 for a perfect baby.

After the mental test the baby is taken to the measurement room where he is weighed and measured.



Where four important measurements are made.

The accompanying cut shows where four important measurements are taken. We quote here a few standards for babies of 6 months, 12 months, 24 months and 36 months of age. The other ages are in proportion.

The weights and measurements also count 100 points out of the total 1,000.

From the weighing and measuring room the baby and mother enter the last room, where the physical examination is given. There the doctors carefully examine baby's eyes, ears,

nose, teeth, throat, chest, abdomen and in fact every part of the body. This is by far the most important examination and counts 800 points

Age in Months.	Weight.	Height.	Circum. of Head.	Circum. of Chest.	Circum. of Abdomen.	Lat. Diam. Chest.	Chest, Front to Back.
	lbs.	in.	in.	in.	in.	in.	in.
6	17	27	17 $\frac{1}{2}$	17 $\frac{1}{2}$	17 $\frac{1}{2}$	5	4 $\frac{1}{2}$
12	19	29	18 $\frac{1}{2}$	18 $\frac{1}{2}$	18 $\frac{1}{2}$	5	4 $\frac{3}{4}$
24	25	32	19 $\frac{1}{2}$	20	19 $\frac{1}{2}$	6	5
36	32	36 $\frac{1}{2}$	20	21	20	6 $\frac{1}{2}$	5 $\frac{1}{2}$

out of the 1,000. Whenever any defect is found the examining physician will not only point it out to the mother but tell her how to remedy it so far as possible.

No entry fee whatsoever is charged. The contest is open to all white babies between the ages of 6 and 36 months. Parents having babies, whether they are fine specimens of babyhood or not, should enter the contest. If they are fine babies they will capture some of the 68 prizes offered. If they are not quite good enough to get a prize the mothers will be shown how to bring baby up to standard, which will be worth many times the value of the prize.

OVER \$400 IN PRIZES

The prizes are arranged in four sets, of 16 prizes each. There will be one set of prizes for Raleigh babies, provided by Raleigh merchants and others, another set for Wake County babies, another for babies east of Wake County and a fourth set for babies west of Wake County. These prizes will be as follows: four prizes for the four best boy babies between the ages of 6 months and 24 months; four prizes for the four best boys between the ages of 24 and 36 months. Similar prizes will also be given for the best girl babies. The value of

these prizes will range from about \$15.00 for the first prize in each class to about \$1.00 for the fourth prize. Then besides the money prizes there will be four championship prizes for the four best babies in the State, boy or girl any age. These State championship prizes consist of gold, silver and bronze medals together with beautiful certificates of reward. The *Woman's Home Companion* is furnishing these medals and certificates besides \$100 in cash for the other prizes.

Governor Craig has just promised the managers of the contest that if possible he will arrange to present the prizes to the champion babies on Friday afternoon at 4 o'clock, immediately after the close of the contest.

Entries are pouring in to the office of the State Board of Health rapidly and arrangements are being made to accommodate about one baby every five minutes. While it will take from 20 to 30 minutes to judge a baby enough doctors will be provided so that a baby will be judged every five minutes. Two large rest tents with cots will be provided for the convenience of the mothers and babies. These tents will be in charge of trained nurses and mothers may leave their babies there in safety while they visit

the fair. Everything possible will be done to provide for the health, happiness and comfort of the mothers and babies.

Many mothers are entering their babies not so much for the prospect of winning prizes but as an endorsement of the movement for the satisfaction of knowing how their babies compared with other North Carolina babies and for the benefit of experts' advice in regard to correcting any slight defects which may be found. It is already planned to offer a special set of prizes next year for the babies who were entered this year and show the greatest improvement made during the year. To be eligible to enter that contest it will of course be necessary to enter the present contest.

Entrance to the contest is easy. All that is necessary is to write the State Board of Health stating the day you expect to attend the fair and the most convenient hour to have the baby judged. You will then be sent an entrance card with an appointment as near the hour mentioned as it is possible to make it. Then if you will present the baby and card at east wing of Floral Hall at the appointed hour, the baby will be judged and scored on his physical merits.

With their parents' consent, some good, first class babies will be weighed, measured and examined in public at the State Fair in order that the people may see how part of a Better Babies Contest is held.

—o—

How do we get hookworms? Easily enough. Somebody else who did not use toilets and sewers or a sanitary privy polluted the soil. Our barefoot children soiled their feet in this material and a case of "ground itch" developed. That meant that the little

hookworms from this filth were burrowing their way into the child's system at this point. After that, the child gets tired easily, fails to grow right, or, if a severe case, it becomes puny and sickly. To cure and to prevent hookworm, write the State Board of Health.

—o—

A Toast.

Heard at the Maggots' banquet in the Manure-Box: Eat, drink and be merry, for to-morrow we'll be flies.—
Ex.

NURSING THE BABY

A baby should always be nursed by its mother, unless the mother has tuberculosis or some other grave disease. The mother saves herself trouble by nursing her baby. When she figures up the saving from diminished illness and adds to it the trouble of fixing the baby's bottle during the night as well as the day, she finds that she nets a gain by nursing her baby.

During the first two days the baby should be nursed four times a day and once at night. From the third day to six weeks the baby should be nursed every two hours during the day and twice at night; from six weeks to six months every three hours and once at night; from six months to a year, six times between 6 o'clock a. m. and 10 o'clock p. m., and not at all during the night.

In addition to milk, babies require water from the very first. The old granny who gave the baby teas was a pretty good scientist, though she did not know it. Of course, the herbs which she used to make the tea had no particular effect, but she was giving the baby sterilized, warmed water, and that was as it should be.

After about the second month the baby should have some orange juice every day. The juice should be given freed from pulp. The amount should begin with two teaspoonfuls a day and should be gradually increased to four tablespoonfuls, especially where there is a tendency to constipation. It is much better to relieve constipation with orange juice than by enemas, and certainly than by medicine, since babies need a little fruit juice to correct any tendency to scurvy and rickets.

That the mother may give enough milk to supply the baby, it is neces-

sary that she be free from worry and not called upon to do a great amount of physical labor. Emotion has more effect on the secretion of milk than does the food taken. Occasionally a woman will overeat until she becomes obese trying to give milk enough for her baby, and then worry so, fearing her milk will fail, that she gains nothing for her trouble.

There are no special foods which make milk. Beer does not; neither does milk. Some women have the idea that milk taken as a food runs without much change into milk for the baby. This is not correct. A mother should eat good, nutritious, simple, staple food containing a good deal of fluids.

That which she eats does not go directly to milk. It is digested and changed chemically thereby. It is absorbed and still further changed. Eventually it is changed into milk. She should increase the quantity of food eaten, since, for her own use, she needs more than she usually does, and, in addition, she is eating for the baby.

The average woman nursing one baby can supply the child with food out of her surplus if she will keep her mind calm, her rest unbroken, and not have too much work to do. The average woman who thinks she cannot nurse her baby can do so if she will try.—*Dr. W. A. Evans, in Chicago Tribune.*

—o—

Next year a special set of prizes goes to those babies who make the greatest improvement during the year. Enter the baby this year to get in on the improvement prizes next year. A poor baby has the best chance to win here.

WHY I AM DOWN ON PATENT MEDICINES

Simply Because They are Expensive and More Likely to do Harm Than Good.

Mrs. W. N. HUTT, in the *Progressive Farmer*.

Hardly a week passes that I do not receive a letter giving simple home recipes for ailments. I am always glad to get them and expect to make use of most of them, as I am filing them for future reference. In several letters I have received are expressions such as this: "I know of some good patent medicines, but since you are down on them you would not want to hear about them."

Listen. Are you "down on" the weeds in your garden? Are you "down on" the lice on your chickens? Are you "down on" the root-worm in your corn? No, you are not "down on" them. You have studied them and their methods and you know that they lower the vitality and usefulness of the crop. Just so, one of my purposes in spending those years of study of domestic science was to gain a knowledge of the body and the healthfulness or harmfulness of those things which affect it, as the farmer studies those things which affect his crop. In advertising against the use of them I am not "down on" them. I simply recognize their harm as anyone may do if she cares to read the literature published by the United States Government and the American Medical Association.

We all recognize the fact that there is no known drug that will be "soothing syrup" to the baby except one which temporarily paralyzes the brain. We know that the headache medicines are heart depressants, and so on through the list. It does not take much thought to realize that with each succeeding dose the body reacts less and less—but how many have not taken the time to think?

Nor are the patent medicines the only ones that harm. Turpentine and sweet spirits of nitre are exceedingly hard on the kidneys. A physician might have given them to Mrs. Smith, who recommends them so highly to you, but he who had made medicine a study would never in the world have thought of letting you take them, because your kidneys were not strong enough for the extra strain. "But," I hear someone say, "what is in it is on the outside of the bottle." Next time you go to town buy the published ingredients instead of the medicine and see the result. If by any chance you should get a similar result—which you will not—you will find that paying retail prices, you can make quarts for the price of a bottle of the stuff. All the large patent medicine makers of whom I know have grown exceedingly wealthy with dollars from the pockets of country people.

The point is, let us pay our money to the physician who knows us and gives us the results of knowledge in return for our dollars, but let us also realize that God gave us the finest medicines in the world free, air and water and sunshine, and the opportunity to study foods, and the intelligence to get them pure and wholesome, well cooked and well balanced. Hard work does not kill; hard living does. Hard living means using the body badly. Three meals of pig meat or food cooked in it mean lessened health and energy; three meals of pure milk and fresh fruit are good and medicine and mean increased health and energy.

FREIGHT RATES AND THE REAL ISSUE

On an average, for every death during a year, there are two persons sick throughout the year. Over 40 per cent of all our deaths are either preventable or postponable. Therefore, of our 40,000 North Carolinians who were last year swept into the great beyond, something like 16,000 should be with us today.

No, it is not God's will that we should let all these our brethren die needless deaths. Don't blame it on the Almighty. We are our brother's keeper. He has given us ample means of stamping out preventable disease, but we don't use them. It is up to us.

We might as well admit the facts. Here they are: 16,000 North Carolinians are being sacrificed annually on the altar of ignorance and lethargy. Within the memory of some of us, common laborers were bought and sold for from 750 to \$1,500 apiece. May we assume that the average value of these 16,000 of our loved ones is \$1,700 each, or a total of over \$27,000,000? That is a tremendous loss to our State—a heavy drain on our State's wealth.

We have 80,000 North Carolinians sick the year around. Half of this sickness is preventable. That leaves our needless sick loss at 40,000 for their entire time. Assuming that one-third of our sick are in the earning or productive period of life and earn on

an average only \$700 a year, we have, therefore, 13,300 times 700 or over \$9,000,000. Add \$9,000,000 more for medicine, nursing, and special food, and we have over \$18,000,000 as our annual loss from sickness. This makes a total annual loss to North Carolina of \$18,000,000 plus \$27,000,000, or over \$45,000,000 annually.

Talk about conservation of national resources—here's the greatest opportunity open for us today. No other opportunity will compare with it.

When it is estimated that our State loses as much as \$5,000,000 annually in excessive freight rates, we hold conventions and conferences, we organize and call extra sessions of the Legislature; but when we lose \$45,000,000 worth of our best North Carolina citizenship no one gets excited, no one talks of an extra session. Why? The main trouble is that most of us don't know that we are suffering a loss of \$45,000,000 annually. Many of us that do know it don't know that the loss is preventable. When we once recognize that this \$45,000,000 is a preventable loss and can be stopped, we will take up the main issue. We will begin public health work in earnest. As it is now, there is practically no public health work done in over 85 per cent of the counties. The only work done there is what the State Board of Health can do through its health literature, lectures, and various campaigns.

CHRONIC CONSTIPATION

What it Does, How We Acquire it, and the Rational Way to Treat It

D. H. KRESS, M.D., in *October Life and Health*.

Chronic constipation exists to an alarming extent among all highly civilized peoples. It is, in fact, the prod-

uct of high civilization. It does not prevail among animals or among savages, whose habits are natural.

We have not appreciated in the past the relation constipation sustains to many of the diseases of a chronic or constitutional nature. Diseases of degeneracy, which have been ascribed to various causes, we now know are due chiefly to the toxins absorbed from the colon as a result of constipation.

From cases which have come under my observation during the past few years, I have been led to recognize constipation as the chief causative factor where insomnia, thickly coated tongue, bad breath and high blood pressure are present, when a specific origin is excluded, and when no history of the free use of tobacco or other toxic substances exists. In fact, I have concluded that it is not the excessive use of meats, tea, coffee, tobacco, etc., that is wholly responsible for arteriosclerosis, but toxins of a more injurious and subtle nature developed in the alimentary canal, and especially in the colon.

These poisons are likely to be formed as a result of the prolonged retention of waste substances which readily undergo decay. Not only do meats, tea, coffee, pepper and mustard tend to bring about these degenerative changes by the toxins they contain, but they favor constipation and the formation of poisons even more injurious. In chronic constipation we have probably the chief factor of degenerate arteries, heart, liver, kidneys, thyroid glands, and other glands of the body. There is strong reason to believe that it is largely responsible for the rapid increase in the mortality rate from heart failure, apoplexy, diabetes, and Bright's disease. In diabetes and Bright's disease there practically always exists a history of constipation.

There are many annoying disorders of every-day life, among which may

be mentioned dyspepsia, headaches, drowsiness, melancholia, insanity, which may be due to chronic constipation. Appendicitis seldom occurs in a person whose bowels are regular. From the prolonged retention of the easily putrefying wastes, a diseased condition of the mucous membrane of the cecum results. This latter extends into the mouth of the appendix, and an inflammatory condition is established. There is a probability that cancer is in some cases traceable to the toxins absorbed from a stagnant colon.

It would be difficult to conceive of anything more defiling to the body than the decay within it of fish, oysters, rabbits, cheese, and other protein foods, and the absorption of the resulting impurities and poisons. Cells bathed in such a liquid become diseased.

A blocked-up city sewer is recognized as a source of danger and is not tolerated, but here we have a condition that is very much more offensive and dangerous, and yet very little serious thought is given to it.

Over thirty per cent of the present mortality is ascribed to this cause by Prof. Eli Metchnikoff, who has made a careful study of the influence of these poisons on the human body, and who believes this to be the chief cause of early degeneracy and premature old age. His contention is that by preventing the formation of these alimentary toxins, man might be at his best at eighty years, be still active at one hundred and twenty, and live to the age of one hundred and forty. He has been driven to some conclusions which may seem almost absurd, and yet, reasoning from his viewpoint, they are logical and conclusive.

Chronic constipation is more common than is supposed. In extreme

cases there exists a movement once in two or three days, and in exceptional cases evacuation of the bowels occurs only once a week.

A natural evacuation of the bowels once in twenty-four hours is considered a normal condition. This is a misconception. One evacuation a day is not sufficient. A bowel movement should be secured at least twice a day, or, better still, after each regular meal, in order to safeguard against putrefaction, and the absorption of toxins from the colon.

It is surprising how easily this habit may be established and maintained. When once established, the desire naturally recurs after each meal, for the ingestion of food into the stomach sets up a peristaltic wave which travels along the entire alimentary tract. In fact, it is less difficult to evacuate the bowels twice daily than once daily. Where but one movement occurs daily, the moisture is absorbed from the feces, and a plug forms in the rectum. The contact of this hard mass benumbs and destroys the sensitiveness of the parts. The rectum having been restored to a normal condition the desire to defecate occurs as soon as feces reach it. The stools are never hard, the consistency being practically the same all the time.

The best time to evacuate the bowels is shortly after regular meals. The taking of food on an empty stomach is a most powerful stimulus to the motor activity of the colon.

During meal-time the contents of the colon make more progress than during four hours preceding the meal. It is quite important that the stomach be empty before introducing food. Frequent meals and eating between meals do not impart this stimulus and hence tend to cause constipation. Regularity of meals, at all events, is a necessity in overcoming this condi-

tion. The same regularity should be established in securing bowel evacuations.

The establishment of a right habit is as effective in getting rid of constipation as the establishment of irregularity is in its causation. It is necessary, therefore, to have a stated time to go to stool.

If success does not attend the effort the first week or even the first two weeks, the thing to do is to keep up the practice. A little assistance may be given by the injection of a cupful of cold water, or the introduction of a suppository; a soft prune or a date, turned inside out, will answer for this purpose. While I do not as a rule recommend laxatives, in order to establish regularity it may be well to take a mild laxative each night before retiring, for a week or ten days.

Agar-agar is of value. About two tablespoonfuls soaked in a little hot water and eaten with apple sauce or some other stewed or canned fruit should be taken with the morning and evening meal. This should be kept up for at least a month. Agar-agar may be secured in any drug store. If the druggist does not have it, he can procure it, as it is regularly used in all bacteriological laboratories.

Liquid paraffin is also of value in very obstinate cases. The dose is one dessertspoonful twice daily at first. These preparations can be gradually given up. The purpose of their use is to establish regularity and the formation of a correct habit.

The food is of the greatest importance. Foods which tend to constipate should be given up. Meats should be used moderately, if at all; it is better to give them up all together. Tea, coffee, cocoa, chocolate, pepper, mustard, and other substances which cause constipation, should be

abandoned. The tannin extracted in steeping tea is especially bad.

Laxative foods are of value. Among these may be mentioned bran crackers, whole-wheat or Graham breads, shredded wheat biscuits, whole-wheat biscuits, puffed wheat, etc.

The following vegetables are valuable: parsnips, carrots, turnips, spinach, raw vegetable oysters, cabbage, etc.

The sweet fruits are all laxative. Prunes, figs, dates, etc., are of value.

In the use of the foregoing foods, care must be exercised in their combination.

In cases where irritability of the stomach exists, with an excess of gas-

tric juice, the above foods should be used sparingly; and where the condition borders on ulceration, they should be entirely avoided until improvement occurs.

The agar-agar and paraffin are especially helpful in these cases. Agar-agar supplies the bulk, but is nonirritating, while the paraffin is a splendid lubricant.

Where digestion is slow and the gastric juice diminished, the foods referred to are indicated.

There are local and general treatments and exercises which are great aids in overcoming constipation, but diet alone will accomplish marvelous results if persevered in.

CHEAPER SANITATION

One thing in North Carolina sanitation stands head and shoulders above everything else when it comes to getting the greatest results for the least money. It is the entire solution of the hookworm problem, the solution of over half the typhoid fever problem, a great share of the problem of so-called "summer complaint," and a big factor in the fly problem. It is nothing more or less than the adoption of the sanitary privy everywhere, where access cannot be had to sewers.

It is an easy thing to show any intelligent person or board of aldermen that the lack of sanitary privies is the cause of the continuation of all our hookworm disease, half our typhoid, and much of our diarrhoeal diseases, to say nothing about flies. However, when you tell such a person or board that a sanitary privy made of iron, wood and concrete costs upwards of \$25, you give them cold feet, and of course no such privy is built. We now know that it costs

no more to build a sanitary privy than it formerly cost to build an insanitary one. If the individual has to furnish the cans it will cost him some 50 cents or sixty cents extra for each can, where he used to have to pay \$1 or more. For cities and towns it is recommended that municipalities own and clean the cans.

The State Board of Health is now securing proposals from several manufacturers for prices on standard privy cans. Of course, the Board cannot advertise any one make of can to the exclusion of others, but it appears that one or two manufacturers are able to make standard cans meeting the specifications laid down by the State Board of Health for between one-half and two-thirds the price formerly charged, when bought in lots of 100 or more. By addressing the Board interested parties may secure the benefit of the best proposals received by the Board for such cans.

WHAT IS THE MATTER WITH YOUR STOMACH?

SAMUEL HOPKINS ADAMS, in the Ladies' Home Journal.

The American stomach is a generally condemned organ. We tend to hold it criminally responsible for all our lesser ills. Nearly half of all medical advertising is aimed at the stomach. As a matter of fact our digestion is as sound as any of our functions. The trouble isn't with our stomachs. It is with our heads. We lack common sense about our processes of nourishment. Nine-tenths of the digestive disorders which lead to the doctor's office or to the hospital are not only preventable and avoidable, but, medically speaking, they are inexcusable. In other words, almost all of our troubles of this sort are due to our own stupidity.

"The average man," says a noted authority, "never considers his stomach until it fairly yells for help."

Now the human stomach is a bag, equipped with nerves and supplied with gastric juice which serves to digest food. It is not an absolutely essential portion of the anatomy. People get on very well and comfortably with half a stomach or a third, or even a fourth; and, at a pinch may live without any at all, the small intestine making shift to do the work of digestion. But normally the stomach is there to receive food, digest it, extract from it the energy necessary for the running of the human machine, and pass the residue on to the intestines for disposal. The processes are highly intricate in detail and, in some phases, still mysterious (nobody can tell, for example, why the stomach doesn't digest and destroy itself); but, in normal conditions, they are carried on so capably and quietly that the body is no more aware of them than of the circulation of the blood. When we become

conscious of our digestion it is because something is wrong with it.

MIND WHAT YOUR STOMACH TELLS YOU ABOUT FOOD

Every stomach has its little eccentricities and inhibitions. This one says: "I cannot digest salt fish." Another warns: "Don't give me preserved strawberries, for I won't have them." A third ordains: "Anything but honey." Or bananas. Or smoked meat. And so on. There is but one rule to cover all these cases: Mind what your stomach tells you; it knows best.

In a broad general sense it may be said that we pamper ourselves too much in the matter of food. Over refinement is a prevalent fault. We eat too much delicately prepared and highly seasoned food and too little coarse and simple food. Processes of preparation sometimes devitalize our viands. Certain nourishing qualities are polished out of the shining white rice which we get exclusively. Our oatmeals are refined down to a point where only half of their value is left. And the white flour which is so generally used lacks certain essential attributes. Whole-wheat bread is given only medicinally nowadays, yet whole-wheat flour is the natural flour, and if it were in common use a majority of those who depend upon laxatives to aid their digestive processes could cast away those noxious drugs.

The same is true of uncooked fruits and vegetables. A considerable portion of the virtue of our vegetable foods goes up the kitchen chimney.

How many people come back from a vacation in the wilds feeling as if they had acquired a brand-new digestion and talking enthusiastically

about the tonic effect of mountain or forest air! Doubtless the air helped in the matter of general condition. But as people don't feed on the atmosphere to any great extent it hasn't much immediate effect upon the stomach. What reconstitutes the camper's interior is the fact that he eats plain food, simply prepared, and gets exercise enough to make him digest properly. It may sound like heresy, but it is a fact that it doesn't really matter greatly what we eat—in conditions of sound health, that is. Some food is better than others, but most of it is pretty good. The healthy stomach is willing and able to take care of any reasonable article which is sent down to it. Only when it is impaired does the owner need to give much thought to diet. In fact, to be continually worrying over the stomach, to exclude this article of food lest it be indigestible, and to eschew that because it might "disagree," to be continually narrowing down the appetite—all this worries the stomach and makes it unhappy.

A specialist of wide experience and a somewhat unconventional habit of thought suggests the following rules to be framed and hung in every dining room:

Eat what you want, and all you want of it, but not more.

Don't eat when you're not hungry, just because it's meal-time.

Take your time over it.

Remember that enjoyment of food is the best of known digestives.

WHAT IS INDIGESTION?

Most familiar to the physician of all forms of complaining is this: "Doctor, my digestion is bad." In perhaps half the instances the reverse is true. The patient's digestion is not bad; it is good. In fact, it is too good. Overefficiency is what causes the difficulty. The stomach,

stimulated into overwork, produces too great a flow of gastric juice, and a condition of hyperacidity results, causing the familiar "sour stomach," with uneasiness, fullness, and sometimes pain. It may arise from causes not connected with food, such as overindulgence in smoking or alcohol, or continued nervousness. In the early stages it is readily corrected by adjustment of habit and diet, and by rest, particularly after eating. Once fixed it is ugly and obstinate. But the stomach always gives warning of its onset, and the man who allows himself to fall into this condition has only himself to blame for it.

One absolutely and universally indigestible thing there is. All authorities agree upon this. It is worry. No stomach can do anything with it. The stomach is simply incapacitated from doing its work properly when the mind is harassed. Far more digestions are ruined by mental than by physical causes.

"Hurry and worry are the twin curses of the twentieth century stomach," one physician put the matter, "and worry is the worse of the two. Give me a man who has systematically lived on the poorest and most indigestible food, but has eaten it with a mind free of taint, and I'll take his case with far more confidence than that of the most carefully nurtured person who regularly brings a harassed spirit to the dinner-table. There is a good deal of truth in Stevenson's picturesque reference to the dining-room as the battlefield upon which most of our ancestors have left their bones; but it wasn't the flesh that they ate, but the spirit in which they ate it that killed them before their time. The most difficult lesson I have to teach my patients is that the stomach is a highly imaginative piece of mechanism; largely gov-

erned by the mind. Under the wrong nervous stimulus it will either quit work entirely or race like the lifted screw of an ocean liner. But the typical patient declines to be impressed by this, and demands drugs and treatments and training to do the work which his own mind could do with a little determined effort."

Because of their specious promises of immediate relief the "patent medicines" secure many patrons from among the hopefully credulous. Usually these pills and powders are cathartics. Their use, continued, soon establishes a hold upon the trustful believer in their virtues.

Probably the cathartic habit is the most widely prevalent addiction in the United States today. Comparatively harmless in the early stages of use, these drugs create a demand for a constantly increased dosage, as the system becomes habituated to them, until at length the victim finds himself a slave to them. The ordinary processes of Nature become paralyzed without them. Then, as he repeatedly lashes his intestines into action by this means, an irritation is set up which has serious and far-reaching results. Fully one-third of the cases of obstinate constipation which come to the specialist show a history of cathartic habit.

"The worst of all common errors," says an expert, "is to overload the stomach and then appeal to purging drugs to carry off the surplus."

A certain "patent medicine" fosters this serious error by advertising that a person can digest anything by taking the pills regularly. This is the kind of advice which makes dyspeptics. As a matter of fact not one person out of a hundred would need laxative medicines if ordinary care were taught from childhood. The stomach and bowels are very much

creatures of habit, and it is really easier to maintain them in good habits, which are natural to them, than to teach them bad ones.

Torpid bowel action, the commonest of complaints, is almost invariably due to neglect and carelessness, and to that alone. Even when it becomes fixed it can generally be cured, by patient attention, without recourse to drugs.

Liberal amounts of water, either hot or cold, immediately upon rising, followed by a hearty breakfast including stewed or raw fruits and whole-wheat bread, will be found more efficacious than any of the widely advertised nostrums.

COMMON-SENSE RULES FOR DIGESTION

To set forth comprehensively rules for restoring to health a deranged digestive system would more than fill this magazine. To set forth rules for preserving in health a sound stomach is a short and simple matter. The following represents a consensus of advice given by leading authorities on gastric and intestinal ailments:

Eat well-selected, well-prepared food, the simpler the better, chewed thoroughly with sound and clean teeth.

Eat it deliberately; never bolt your good.

Don't be a faddist; whatever you like is good for you in moderation.

Use tobacco and alcohol moderately if at all, but remember that they are irritants even in the smallest quantities.

Shun cathartics and laxative drugs.

Obeys the natural orders of your stomach and intestines.

Don't harry and shock your stomach with iced concoctions.

Never eat when very tired or under emotional or nervous stress.

Above all, don't mix work or worry with your meals.

The man or woman who follows these primary regulations will still have left a reasonable range of ills from which to die in the fullness of

time; but at least, for that one, death will not be hastened nor life poisoned by the too common torments of indigestion and dyspepsia.

BRICKBATS AND BOUQUETS

Last month several changes were made in the HEALTH BULLETIN. At the same time we offered our readers a "come back" in this issue of the BULLETIN in order to find out how they liked the changes. It was planned to head the department "Brickbats and Bouquets," but so far the department lacks the variety we had hoped it would have. We are anxious to have some good stiff constructive criticisms. It won't hurt our feelings. We simply want to know how to make the BULLETIN more valuable to our readers.

Here is what a few of our readers said:

"I congratulate you on the current issue of the BULLETIN. I wish you to send me 200 copies if available and place the following names on the mailing list. * * *

"J. HOWELL WAY,
"President State Board of Health."

"Many thanks for the HEALTH BULLETIN. It is fine.

"ANNA STEESE RICHARDSON,
"Woman's Home Companion."

"I have just run through the September BULLETIN. I didn't know who

was editing it until I reached the last word. If power to interest and instruct makes good editing, my experience with this number is evidence that you are a success from the start.

"You and Rankin are engaged in the most useful business that I know of.

J. W. BAILEY,

"Collector Internal Revenue."

"The September issue of the BULLETIN is jussy 'bully.' Keep at it. You are on the right track. The brevities are fine; the 'Brickbats and Bouquets' I am sure will be popular.

"GEO. A. WOOD,

"Nazareth Catholic Orphanage."

"I think the September BULLETIN is excellent. I have enjoyed it thoroughly.

DR. WM. S. JORDAN."

"I am very much interested in your monthly HEALTH BULLETIN. This month's issue is very good. I have often wished that everybody in the State could read it each month.

"GEO. Y. WATSON."

"I certainly did enjoy reading your last BULLETIN—the September number.

B. F. MONTAGUE."

When a thing reaches the point of becoming a problem, there is hope. It is the utter indifference to the seriousness of the health situation that has made the death rate so high and the life interest so low. When men made public the appalling waste of life, the public made assault upon them for their "unpatriotic" exposure of home

conditions. Health reformers have to fight their way, as every other reformer has had to do, and it is now accepted that the so-called "fancy diseases" are not fanciful and that prevention of more than half the deaths should be easy.—W. T. Bost in *The News and Observer*.

SANATORIUM SPECIAL



The Health Bulletin

Published by THE NORTH CAROLINA STATE BOARD OF HEALTH

This Bulletin will be sent free to any citizen of the State upon request.

Published monthly at the office of the Secretary of the Board, Raleigh, N. C.

Entered as second-class matter at Postoffice at Raleigh, N. C., under Act of July 16, 1894.

Vol. XXVIII.

NOVEMBER, 1913.

No. 8.

"Public health is purchasable. Within natural limitations a community can determine its own death rate."

CONTENTS

"Mechanical Fakes": The Electropoise—Oxypathor.....	132
Yadkin County Decides to Spend \$200 a Year on Health.....	134
A Girl's Encouragement.....	135
Typhoid Vaccine Free.....	135
Mental Hygiene Conference and Exhibit Coming.....	136
Charlotte's Campaign against Typhoid.....	137
The Death Rates of Wilmington.....	137
Mr. Mayor: This for You	139
The State Sanatorium	141
(a) State Tuberculosis Policy.....	141
(b) The Cost of This Policy.....	143
(c) Requirements for Admission.....	143
(d) Location of Sanatorium.....	145
(e) Site of Sanatorium.....	145
(f) Equipment of Sanatorium.....	145
Sanatorium Staff	147
(a) Dr. Wilson Pendleton.....	147
(b) What Others Say of Dr. Pendleton.....	147
(c) Business Management	151

JERARD U. N. C.,
CHAPEL HILL, N. C.

THE Health Bulletin



PUBLISHED BY THE NORTH CAROLINA STATE BOARD OF HEALTH

J. HOWELL WAY, M.D., *President*, Waynesville
RICHARD H. LEWIS, M.D., Raleigh.
J. L. LUDLOW, C.E., Winston-Salem.
W. O. SPENCER, M.D., Winston-Salem.
THOMAS E. ANDERSON, M.D., Statesville.

W. S. RANKIN, M.D., *Secretary and Treasurer*, Raleigh.

CHARLES O'H. LAUGHINGHOUSE, M.D.,
Greenville.
EDWARD J. WOOD, M.D., Wilmington.
A. A. KENT, M.D., Lenoir.
CYRUS THOMPSON, M.D., Jacksonville.

Vol. XXVIII.

NOVEMBER, 1913.

No. 8.

“MECHANICAL FAKES”

The Electropoise -- Oxydonor -- Oxygenor -- Oxygenator --
Oxypathor -- Oxytonor.

“It is sometimes hard to decide which is the greater—the impudence of the quack or the credulity of his victims. The comparative ease with which the medical faker is able, by the most preposterous claims, to separate the trusting from their money indicates the enormous potentialities in advertising. It might be supposed that an individual who set out to sell, as a panacea for all the ills of the flesh, a piece of brass pipe with one or two wires attached to it, would, commercially speaking, have a hard and rocky road before him. But such a supposition would be incorrect. Not only would the enterprising faker find customers for his gas pipe, but there would be such a demand for this most inane of ‘therapeutic’ devices that two or three imitators would immediately enter the market.”

Sanche's Inventions.

The American Medical Association's exposé tells how one Hercules Sanche, self-styled “Discoverer of the Laws of Spontaneous Cure of Disease,” became the original exploiter of mechanical fakes. “Sanche's first and simplest

gas pipe cure device he called the Electropoise.”

The shrewd Sanche realized that, in order to patent his device and at the same time prevent physicists and chemists and other scientists applying laboratory tests to the device and exposing it as without any known physical, chemical or other influence, it would be necessary for him to “discover” and attribute to his gas pipe cure some hitherto and thereafter unrecognizable power; so he said that the instrument rendered the body oxygen positive; that is, that it made the body absorb larger quantities of oxygen. He later named this newly “discovered” power “Diaduction.” Oh, you needn't look in the dictionary; the word isn't in it. No one, Sanche argued, “had ever realized before that by attaching a piece of nickel-plated brass tubing to the body by means of a flexible cord the system could be made to absorb oxygen.”

Of Diaduction Mr. Justice Shiras, of the United States Supreme Court, says: “I am entirely certain that I do not understand the working of this so-called force, if any such exists, and I

greatly doubt whether Dr. Sanche has any clear conception of the force or principle which he seeks to describe under the name of 'Diaduction.'

Other judges have said: "From the record evidence we have tried to get some intelligent idea of 'diaduction.' We have failed utterly."

And again: [The theory] "is a mere pretense, that is to say, a theory not entertained by the inventor in good faith, but put forward as an imaginary hypothesis merely for the purpose of obtaining a patent on a very simple contrivance, which was not patentable unless the claim was reinforced by some such pretended discovery."

The Progeny of the Electropoise.

From Sanche's original idea, embodied in the Electropoise, there descended the whole family of "Mechanical Fakes," to wit: The Oxydonor, Oxygenor, Oxygenator, Oxypathor, and Oxytonor.

The members of this family bear well marked family resemblances. They all consist of nickel-plated metal tubes with closed ends. To this tube is attached one or more flexible cords, which end in a strap to be buckled or attached to some part of the body. The Electropoise was empty; the Oxydonor contained a stick of carbon; the Oxygenor contained sulphur, sand, and charcoal; the sulphur and sand together comprising 97 per cent of the whole. The Oxygenator also called the Oxypathor, according to the Laboratory of the University of Vermont, "is filled with a black powder, which analysis disclosed to be a crude mixture of inert substances, apparently the waste or by-product of a manufacturing plant. * * * The powder is a rough mixture of iron filings, clayey material, and a dark-colored carbonaceous mass, * * * apparently nothing more than coke dust or carbon-black."

The family resemblance is again apparent in the claims as to their mode of action. They are all claimed to act by "diaduction," or by causing the body to absorb oxygen. They claim also to cure practically all diseases, with the exception of cancer and tumor and far advanced consumption. The exception made is probably for the purpose of avoiding prosecution under the federal law that prohibits a considerable amount of fake cancer cure advertisements.

The Oxypathor.

According to "Nostrums and Quackery" it would seem that the Oxypathor is the youngest member of the family group or the last alias adopted by Sanche's original idea.

"In many ways," says Nostrums and Quackery, "this last type of gas-pipe cure is the worst, inasmuch as claims are made for it that are not only absurd but dangerous. For instance:

Diphtheria: This overwhelming child's disease finds its supreme master in the Oxygenator. No earthly power except the Oxygenator can take the slowly choking child and with speed, simplicity and safety bring it back to health.

'Don't jeopardize the health and life of your children by allowing to be injected into their veins and blood the often fearfully contaminated and death-dealing serum of an animal, otherwise known as antitoxin.'

"It is difficult to restrain one's indignation at the thought that such viciously cruel lies as these are permitted to be scattered broadcast. Let the neurotic and neurasthenic adult, if he can convince himself that a nickel-plated piece of gas-pipe possesses curative properties, experiment with it on his own person if he wishes. But that a helpless child in the throes of a fearfully dangerous—and yet, rightly

treated, curable—disease, should be allowed to suffer and die because ignorant parents have been persuaded to rely on these mechanical frauds, is no less than criminal. As for the miserable harpies who for a few filthy dollars will write such cold-blooded untruths as those quoted above, the safety of society demands that they be put where they can do no further harm."

"The State Board of Health of Vermont declared the Oxygenator to be 'physically and therapeutically inert' and prohibited the sale of the fraud."

Summary.

"To sum up: The 'Electropoise,' the 'Oxydonor,' the 'Oxygenor,' the 'Oxygenator (or 'Oxypathor') and the 'Oxytonor' are utterly worthless except as

a means of enriching their exploiters. Their therapeutic value, aside from the element of suggestion that may be induced in those who are willing to pay from ten to thirty dollars for a piece of nickel-plated tubing, is absolutely nil. As already said, if adults wish to squander their money on such foolishness and are content to confine the 'treatment' to their own persons, well and good. If they have nothing much the matter with them they may believe they have received benefit; if they are dangerously ill, Nature will probably exterminate them as unfit. But let no person try to 'cure' the helpless child with such frauds; as soon as that is attempted, such an individual ceases to be a harmless idiot and becomes a dangerous one."

YADKIN COUNTY DECIDES TO SPEND \$200 A YEAR ON HEALTH.

This is going some, isn't it? A physician of that county writes: "Our Board of Health lets everything take care of itself. We are now having scarlet fever in several portions of the county and 'not a one' has been quarantined. Our Board of Health met the first Monday in October and elected Dr. S. L. Russell for one year at the extravagant salary of \$200. So you see we will have everything quarantined and fumigated. (He is to furnish all disinfectants)."

In Yadkin County there are 16,000 people—men, women and little children. Assuming that the average death rate of the United States prevails in that county, there are 250 of these people who die every year. There is an amount of sickness equivalent to 750 of the Yadkin folk being in bed the entire year. 100 of these deaths are from preventable diseases, and 250 of the bedridden sick people ought to be on their feet earning a living for them-

selves and others. 35 of the 100 deaths are from consumption; there are 100 other active cases of consumption in the county. There are 8 deaths from typhoid fever; there are between 80 and 90 other cases of fever every year. There are 8 or 10 deaths from contagions. 20 babies under two years of age die in that county every year from diarrheal diseases, and about 150 other babies are sick from that disease.

Now, evidently these diseases, that most of the civilized world has regarded of a preventable nature, acquire very peculiar properties when they break out in Yadkin; they become wholly unpreventable. Up there man has no control whatever over these diseases and therefore no responsibility for their occurrence. All that the rest of us can do when the folk die in Yadkin is to extend our sympathy, and let the preacher say, "the Lord giveth and the Lord taketh"; the county commissioners can't help it.

A GIRL'S ENCOURAGEMENT.

Some days ago the State Board of Health received a letter asking for an investigation and an opinion as to the influence of a swamp on the community in which the writer of the letter lived. The letter indicated such mature and intelligent interest in health matters that in our reply we stated that we would try to make the investigation at an early date, and at that time to meet and advise with the writer and other authorities of in regard to the proper treatment of the ponds. In reply to our letter the writer of the initial letter among other

things said: "I am only a girl, Dr. Rankin, and I don't know that I would be of any help to your representative." This letter is one of the most encouraging that we have received in some time; it indicates the interest of the younger generation, and what they are going to do when a few more years give them some control in civic matters. It has been a long time since the State Board of Health received a request that it will more gladly comply with than this one from "only a girl."

TYPHOID VACCINE FREE.

The State Laboratory of Hygiene announces that it is now ready to distribute, on request, typhoid vaccine free to the citizens of North Carolina. The Laboratory trusts that only those citizens who expect to use it will request the vaccine, but the Laboratory is very anxious that as many of our citizens be persuaded to take advantage of the State free vaccine as it is possible for our influence to reach.

Now do not get the idea, because we are giving the vaccine away, because it will cost you nothing, my fellow citizen, that it is without value. Vaccination against typhoid fever has passed all the tests of science and practice and has won as permanent a place among sanitarians as vaccination against smallpox.

In a very thorough review of the results of anti-typhoid vaccination in the Journal of the American Medical Association, under date of August 30, 1913, Major Frederick F. Russell, of the medical corps of the United States Army, presents such convincing facts

and figures as to leave this question of vaccination against typhoid fever no longer a matter of opinion. In the last four years over 200,000 people have been vaccinated against typhoid fever; no bad effects from the vaccination have occurred. Among the 85,000 vaccinated men in the United States Army, located at different posts in the United States and her colonies, there has not been a single case of typhoid fever since December 6th, of last year. There have been fewer cases of typhoid fever among the vaccinated soldiers than cases of smallpox among the soldiers vaccinated against smallpox. The opinion among sanitarians at present is that typhoid vaccination is as effective as smallpox vaccination.

The vaccine is in liquid form and is administered hypodermically, being injected either into the outer side of the arm or into the tissues of the breast. The discomfort—because we can not call it pain—of the injection is practically the same as the injection of various forms of medicine. Any doc-

tor can administer the vaccine. The vaccine is in three doses, which have to be given on three separate days, five days apart. In from ten to fifteen per cent of the cases there is slight swelling and redness, and a little pain about the injection lasting for a day or so; associated with these local symptoms is usually a slight feeling of indisposition, vague, dull aches similar to the preliminary symptoms of a cold, and, maybe, from a half to a degree of fever. The second injection is not nearly so likely to be followed with these sensations as the first, and the third injection still less likely than the second to be associated with unpleasant sensations. The protective power of typhoid vaccine lasts for four years. The protective power not only protects against the contraction of the disease but, in those exceptional cases where the disease is contracted, protects to a considerable extent against a fatal outcome, a kind of double protection.

The State Board of Health entertains the hope that those counties employing whole time health officers will have their officer arrange certain dates in the county, town or other convenient places for citizens to visit, where any citizen in the county can be vaccinated, without cost, either for typhoid fever or for smallpox. If the health of the human animals of the counties are worth anything from a purely economical standpoint in the production of cotton and corn and wheat and meat, thereby increasing the value of land, and by all this adding to the wealth of the county treasury through the taxes that are levied, it would seem to be a very fine piece of business for the owners of this productive source of wealth, for the county government, particularly the county commissioners, to spend the small sum necessary for this free public vaccination in the maintenance of their human machinery.

MENTAL HYGIENE CONFERENCE AND EXHIBIT COMING

A great treat is in store for North Carolina teachers and others interested in Mental Hygiene and the betterment of the race. Through the initiative, generosity, energy, and forethought of Dr. Albert Anderson, Superintendent of the State Hospital at Raleigh, arrangements have been made to have a Mental Hygiene exhibit and conference at the Raleigh Auditorium from November 28 to December 5th. This is the same exhibit which attracted so much attention at the International Congress on Hygiene and Demography at Washington last year. The exhibit is free and the public is cordially invited. Demonstrators and attendants will be on hand to explain everything connected with it. It will undoubtedly be one of the best exhibits ever given in North Carolina. It will

mean a tremendous uplift all over the State if several thousands of our teachers and public spirited citizens will learn the great lesson taught by this exhibit.

Besides the exhibit, there will be held North Carolina's first conference on Mental Hygiene. A program is being arranged for two sessions daily, afternoon and evening. Some of the foremost specialists in the country will lecture on various phases of mental health. Among others will be Dr. Adolph Meyers, of Johns Hopkins University; Dr. Wm. A. White, of Washington, D. C.; Dr. James Parrott, of Kinston, President of North Carolina Medical Society, and many others of equal calibre. The daily press will make full announcement of the program later.

CHARLOTTE'S CAMPAIGN AGAINST TYPHOID.

Several weeks ago the City of Charlotte elected Dr. R. F. Linebach Assistant Superintendent of Health, and delegated to him the work of preventing disease. Doctor Linebach seems to have definite ideas as to his work; his campaign in attacking preventable diseases suggests the idea of selecting one specific thing and going after that, and then taking something else. We like this. There is entirely too much diffusion in planning health work, and we sometimes think the plans of health officers might be made a little less vague and a little more definite.

Doctor Linebach has selected typhoid fever as the first disease with which he will deal; he has made an interesting study of the typhoid problem of Charlotte; his investigation has shown

that 74 per cent of the typhoid fever occurring in Charlotte occurs in families using wells, and 90 per cent of the wells used by these families have been found polluted. His investigation has been in line with all other investigations in finding that the frequency of typhoid fever is greatest in those wards with open privies, and less in the wards that are thoroughly sewered. Based upon his investigation and findings, considerable pressure is being brought to bear on the city fathers to extend their water and sewer mains. Another important point still under consideration in the fight against typhoid in Charlotte is the proposition to close all polluted wells as soon as their pollution is shown by laboratory examination.

THE DEATH RATES OF WILMINGTON.

We have been taken to task for never having referred in the Bulletin to the death rates of Wilmington. We do not recall having referred in the Bulletin to the death rates of any particular town under the name of the town; we have used, however, in our effort to educate public opinion to the point of enacting a vital statistics law, the death rates of several towns and cities in North Carolina under fictitious names. We have not thought it fair to call attention in the Bulletin to the comparative death rates of different towns and cities when we have felt reasonably sure that some of the towns and cities with low rates were negligent in the complete registration of their deaths.

This office has been without means of verifying local death rates until within the last two months, since

which time we have had an inspector on the road. We trust that this explanation will satisfy those who seem to think that we have been negligent in not having given space already to the Wilmington death rates.

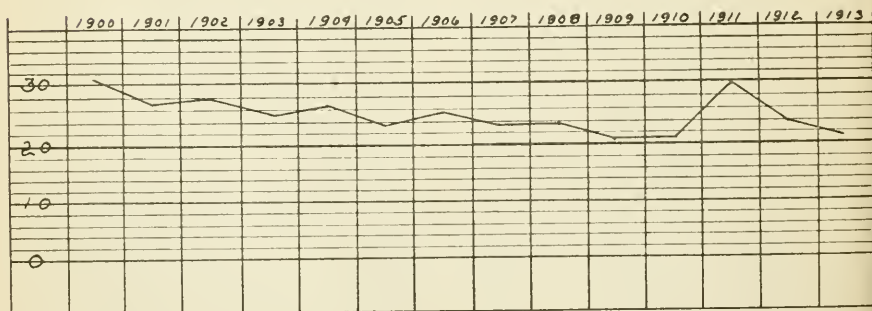
The death rates of Wilmington are very interesting and the following charts are worthy of careful study. The figures of the charts up to and including the year 1910 are taken from the Mortality Statistics, United States Bureau of the Census, and the figures since 1910 from the records in the State Registrar's office.

There is no witness so trustworthy in the study of the quality of health work as vital statistics. This witness, however, must be made to testify in strict accordance with the prescribed oath, "to tell the truth, the whole truth, and nothing but the truth." The

WILMINGTON, N. C.

YEAR.	General	Typhoid	Tuberculosis	Diarrheal Diseases Under Two Years	Combined Contagions
1906.....	25.3	83.6	276.	-----	10.4
1907.....	23.2	45.1	327.	-----	3.0
1908.....	23.4	56.3	273.	-----	8.0
1909.....	21.3	78.9	260.	193.	.9
1910.....	20.8	73.5	197.3	205.	5.8
Average 5 years.....	22.8	67.4	266.6	-----	5.6
1911.....	29.6	121.	243.	303.8	318.9
1912.....	23.7	63.4	272.2	249.8	7.4
1913 (estimated).....	21.6	84.3	208.8	274.7	19.3

The general death rates are per 1,000; the special disease rates per 100,000.



great trouble with the statistical' witness is not that the witness fails to tell the truth and nothing but the truth (this witness never lies), but that frequently the witness is not given a fair chance to tell the **whole truth**.

Attention has been specifically directed to the reduction in Wilmington's death rates since 1911. Now the charts show that 1911 was an exceptional year and not an average year in the health record of Wilmington. This question, then, becomes pertinent right here: Should exceptional years be used as the standard by which to measure the efficiency of health work? Should a health officer, whose administration began in a year characterized by exceptionally low rates, rates lower than for ten years, be discredited because he gets no reduction or only a very slight reduction in his rates during the first and second years of his work? Likewise, should a health officer be credited with the full reduction of death rates coincident with an administration which started during a year with exceptionally high or epidemic rates?

We believe that an average year should be used as a standard of measurement, and that such a standard is the only fair measure to be adopted in judging the quality of health work on a death rate basis.

If we study the death rate of Wilmington from this standpoint, it would appear that the health work coincident with the half decade from 1906 to 1910 inclusive, expresses itself in a statistical drop from a death rate of 25.3, which was even less than the average in the preceding five years, to a death rate in 1910 of 20.8. I submit that this decline, considered in accordance with the principles of statistical practice, as above suggested, is even more creditable than the decline since 1911, which was an exceptional year.

Now, in conclusion, I wish to say that, notwithstanding that the rates most frequently quoted in regard to Wilmington go back only to 1911, and start, therefore, from an exceptional or epidemic year as a basis of measurement, we think the decline in death rates, even during the last few years, is very satisfactory. We might point out, however, in this connection, that there is still much to be accomplished.

The typhoid rates are still three times the average for the United States. The diarrheal diseases of children under two years of age are two and one-half times the average, and tuberculosis is 50 per cent higher than the average, and finally, the general death rate for this year, 21.6, is 20 per cent above the average urban death rate in the United States.

MR. MAYOR, THIS FOR YOU.

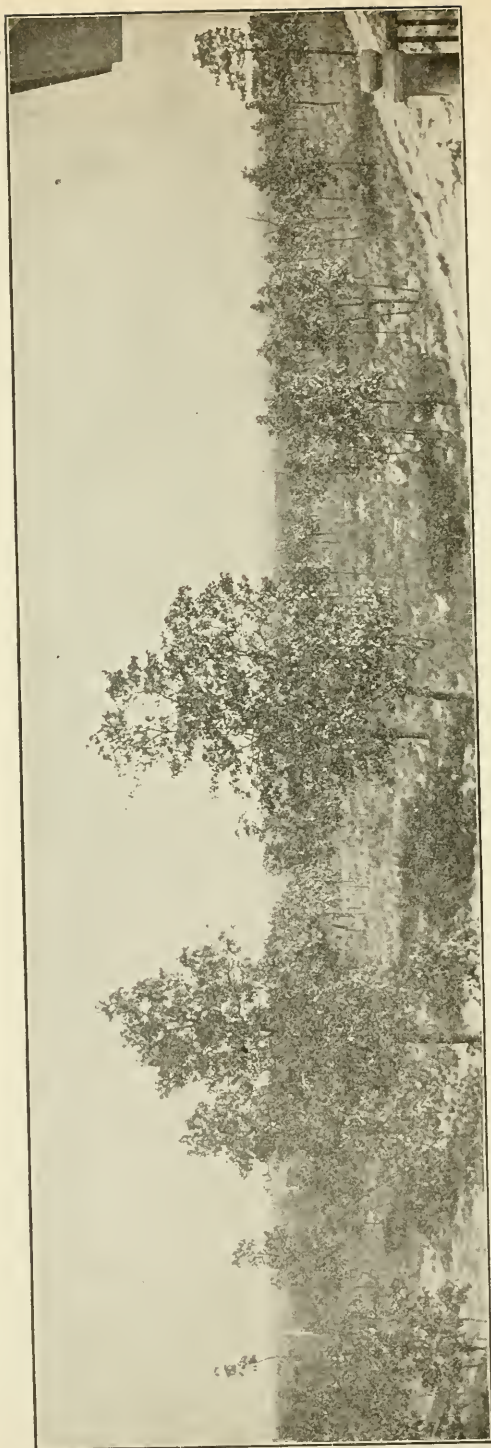
"It is in health that cities grow; in sunshine that their monuments are builded. It is in disease that they are wrecked; in pestilence that effort ceases and hope dies.

"Therefore, in the not very long ago, you created a department. You bade it guard the public health. You gave it a trust that may not be broken. You

charged it with a vigil that is sacred.

"And you assumed a duty. You tendered fealty to this, your greatest department; for had you not bade it watch over the lives of men and women and little children.

"Nor creed, nor faith, nor party may forget."—*The Healthologist*.



A Park View of the Sanatorium, Looking North from the Nurses' Building.
See Far-away Appearance of Horizon.

THE STATE SANATORIUM

Under the Management of the State Board of Health---Board
Announces Definite and Comprehensive State Policy
for Dealing with Tuberculosis

The management of the State Sanatorium has been transferred, by legislative enactment of the Special Session of the General Assembly, to the State Board of Health. The transfer was initiated and engineered by the former Board of Directors of the Institution. While the State Board of Health had not asked for the Institution, the Board very cheerfully accepts the responsibility of management. We believe the Institution to be capable of filling a very real need in the life of the State, and that it has a very bright future. The State Sanatorium will represent a part of a general policy of the State Board of Health for dealing with the problem of tuberculosis.

State Boards of Health should look upon tuberculosis as something distinctive from the general run of preventable diseases. One-fourth of all preventable deaths is due to tuberculosis. That means that one-fourth of the opportunity of State Boards of Health, and other health boards, for that matter, is tied up in the management of the tuberculosis problem. These considerations are responsible for the adoption by the State Board of Health of the following

State Tuberculosis Policy.

The central idea of this policy is one of education. The educational scheme will embrace the Sanatorium as a sort of central school, and a

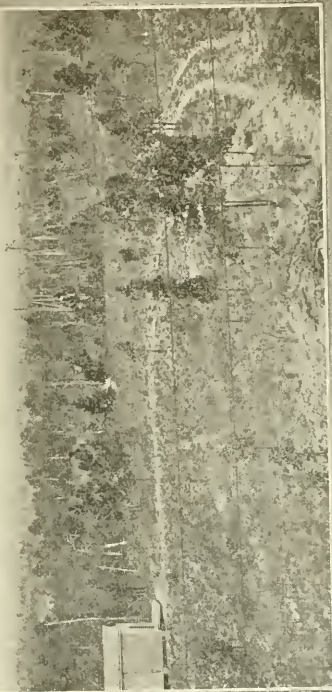
Bureau of Tuberculosis, to be established in connection with the general health work, as a correspondence school. The State Sanatorium, by the first of January, will have a capacity for 125 patients, which will be sufficient for the treatment of 250 patients a year, assuming the stay of the average patient to be six months. In the Institution these people will be taught by personal contact, by illustrated lectures, and by the rules of the Institution how to readjust their lives to Nature's laws and so secure a new lease on life, and how to live with others without infecting them. This training will be carried back by these 250 patients a year into their communities and counties, and its influence will be of great benefit to their fellow sufferers at home who have been unable to attend the training school.

The Bureau of Tuberculosis will have reported to it, under the requirements of a recent enactment, seventy-five or eighty per cent of all recognizable cases of tuberculosis in this State. These people, from 8,000 to 10,000 victims of the disease, will be matriculated as members of a correspondence school for tuberculosis. At the head of this Bureau will be a man who knows how to write a strong, personal, appealing letter,—a man of great resourcefulness and tact, and a man above all with a deep, sincere, altruistic nature. In an unofficial way and



View of the Sanatorium Park, Looking Southwest over Gorge
Towards Hamlet.

Not a drop of water is to be found in any of these gorges.
The sand drinks it up as fast as it falls.



A View of the Sanatorium Park, Looking South from the Pavilion.
Made at Sunset.

in a very personal way he will seek, by correspondence, to make the eight or ten thousand people reported to the Bureau feel his interest in them; by correspondence and by a leaflet or pamphlet from time to time he will endeavor to encourage his scattered school in their work for life, to teach them how they may regain their strength and teach them their obligation in protecting others, with whom they may be associated, from tuberculosis.

Another function of the correspondence school that will call for a high degree of resourcefulness is for the Bureau of Tuberculosis to investigate the claims of deserving indigents, and through boards of county commissioners, churches, lodges, or other organizations to which the indigent, or the person upon whom the indigent is dependent, belongs, secure the necessary funds to take care of those who would die unless supported from outside sources. One of the principal measures of success by which the Bureau of Tuberculosis will be judged will be its ability to keep the Sanatorium filled with patients who could not themselves pay for their treatment, but whose treatment is paid for by interested organizations—political, social, or fraternal—and philanthropic individuals.

This combination of the Central Training School, as an educational nucleus, with a correspondence school of eight or ten thousand consumptives, is suggestive of the educational scheme in practice in the State of Wisconsin by the University of that State, which is rapidly and deservedly becoming a model to other state universities.

The Cost of This Policy.

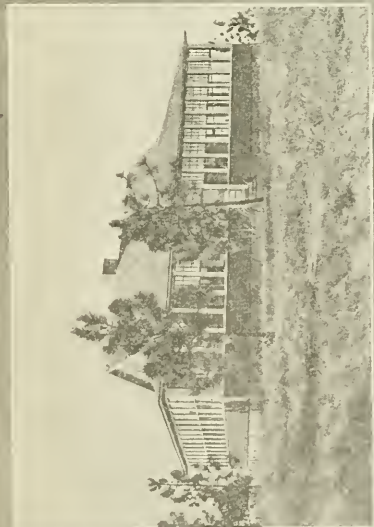
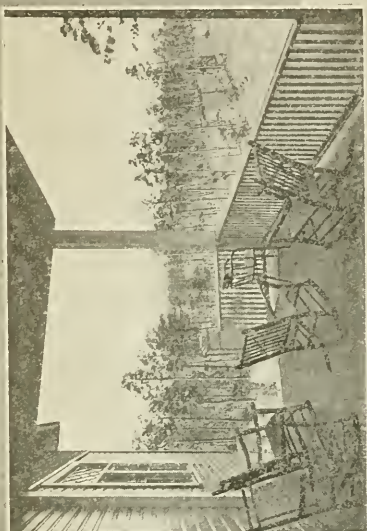
The State of North Carolina has invested in its present plant something like \$50,000. The interest on that in-

vestment amounts to \$3,000 a year. The State appropriates for the maintenance of this Institution and for the maintenance of the correspondence school idea, \$20,000 a year; so that we might say that this state tuberculosis policy will cost the State, in round numbers, about \$25,000 a year. It will be necessary in our State Institution, as it is in, practically all state sanatoria, that the patients pay \$1.00 a day for treatment. This will seem to some rather expensive. On investigation, however, it will be found that this is the general practice of state sanatoria; that in different state institutions the per capita charge is from four to ten dollars a week. On the other hand, when one recalls the fact that it now costs one to get sanatorium treatment or to be treated by a specialist, from sixty to one hundred dollars a month, the State's charity at once becomes evident. While it is necessary to maintain the Institution to charge each patient one dollar a day, it should be remembered that, under the policies above outlined, many of the patients, we hope most of them, will be patients who themselves are paying nothing, but whose expenses are paid by their friends and the organized interests—political, social, and fraternal—of which they are a part.

Requirements for Admission.

Patients, before being given a card of admission, will be required to have filled out by their physician a blank form furnished by the Medical Director of the Sanatorium, and return the information contained on this form to the Sanatorium in order that the management may know their condition. Incipient patients will be given preference over moderately advanced cases, and advanced cases will not be admitted. Patients and physicians are warned against going to the Sanatorium without first communicating

Well Lighted and Ventilated Patients' Quarters.



with the Medical Director and ascertaining whether the capacity of the Institution and the condition of the patient will permit the admission of the patient. The fatality of incipient tuberculosis under average treatment is not more than 10 or 15 per cent; the fatality of moderately advanced tuberculosis is 40, 50, or 60 per cent; and the fatality of advanced tuberculosis is 90, 95, or even a higher per cent. It is, therefore, as evident as it is reasonable, that as long as the State's capacity to take care of her consumptives is as limited as at present, advanced consumptives, bedridden consumptives, who have already practically lost their chance to live should not be allowed to occupy the few beds that the State now has, and that would otherwise be used for consumptives in the incipient stage of the disease with 85 or 90 chances in a hundred to get well. The reasonableness and the economic considerations, as well as the humanitarian considerations underlying this fundamental principle in the future management of the Institution are too evident for argument.

Location of Sanatorium.

The Sanatorium is located at Montrose, in Hoke County, on the Rockfish and Aberdeen Railroad, nine miles southeast of Aberdeen. The Sanatorium is about twelve miles from Pinehurst and about the same distance from Southern Pines. In this region of these well known winter resorts the Institution has an ideal location. The warmer and more uniform temperature of this region gives the Montrose Institution a natural asset which very probably more than makes up for the better equipped and larger endowment of the more widely known institutions of our northern, colder climate. Here the air is dried by its course across the white sand and is

filtered pure and healthful through the needles of the long leaf pine.

Site of Sanatorium.

When one alights from the train at the little station of Montrose, after having passed through a flat country, rather desolate looking, with sandy soil and blackjack and pine growth, and ascends a gentle slope, a most surprising view opens up before him. So suddenly and distinctly different is the scenery from that of the surrounding country, that its very unexpectedness adds interest to its beauty. Indeed, Nature seems to have prepared and set apart this spot for the very purpose to which it is now dedicated. Standing on a plateau about six hundred feet above sea level, one can see from ten to fifteen miles in almost any direction. The view invariably makes one think of the mountains of Western North Carolina. In one direction a sand road eight or ten miles away can be seen easily.

Equipment of Sanatorium.

The Sanatorium is situated on a farm of about 1,300 acres. There are about 700 or 800 acres of this land suitable for farming; there is also much valuable timber on the land. A creek passes through the farm which, after it is dammed, will furnish the necessary power for electric lights and light machinery needed in an institution of this kind.

At present there are three buildings for patients, with capacities of 15, 35, and 75 patients each; there is a dining room sufficiently large to seat 100 people. A refrigerating plant will be installed beneath the kitchen some time before next spring. There is a nurses' building for the nurses, a small cottage for the physician, and a pavilion which will be immediately equipped and hereafter used as a library and



view of Sanatorium Park, Looking West Toward Pinehurst, Showing Rapid Re-foresting in Long-leaf Pines.

club room. This building will be equipped with such games as patients with incipient and moderately advanced tuberculosis may engage in; a good Victrola with suitable records will add to the attraction of the pavilion. On the grounds there will be such light outdoor games as croquet, and other games that tuberculous patients may enjoy. The new Medical Director, who is familiar with the construction of sanatoria, is delighted with the construction of the buildings. The buildings are lighted by electricity, heated by open fires, and supplied with warm water and shower baths. There is also a good two-story farm house and a well constructed dairy with capacious silos.

SANATORIUM STAFF.

Dr. Wilson Pendleton.

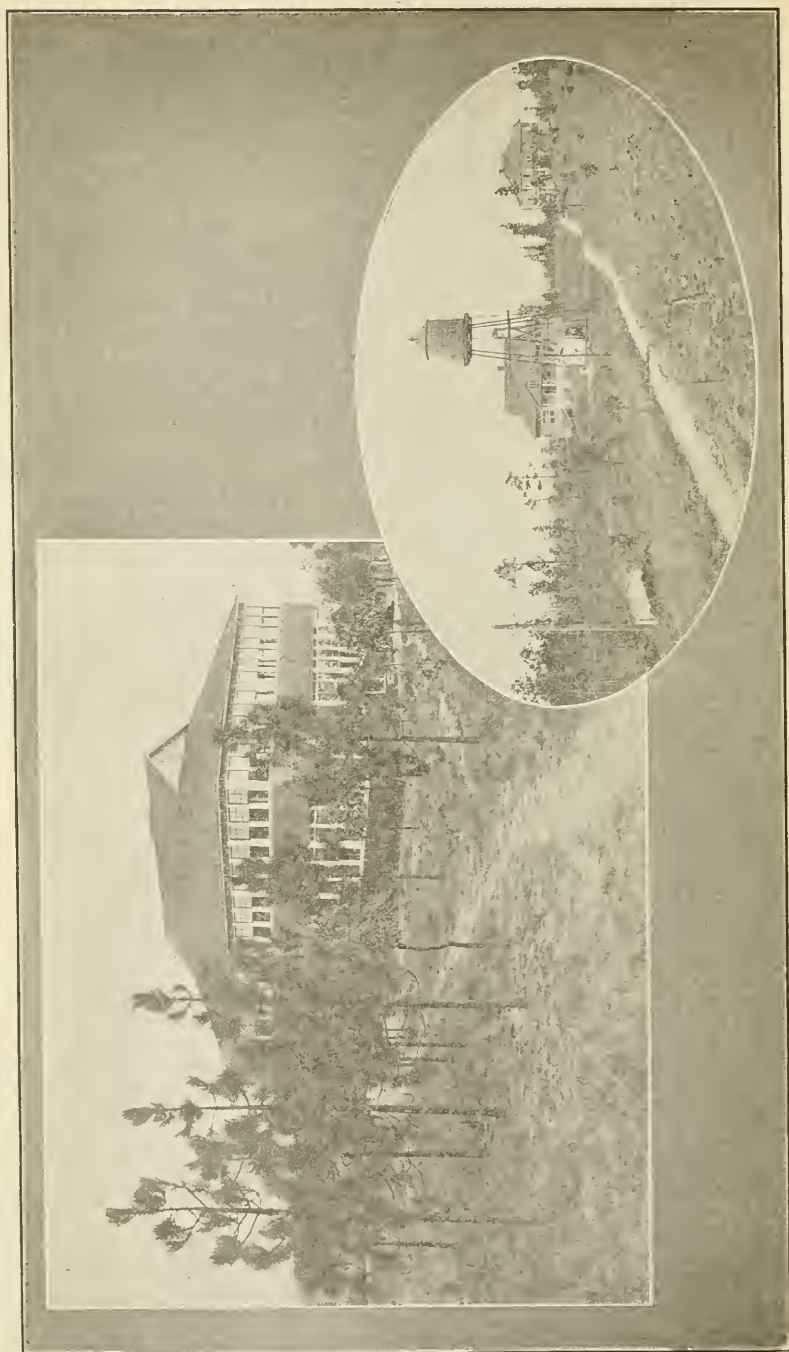
Dr. Pendleton is the man to whom the State Board of Health pins its faith in taking over the Sanatorium. Dr. Chas. L. Minor, so well known as a tuberculosis authority, not only in this State, but in the nation, in writing to the Board strongly recommending Dr. Pendleton and urging the Board to elect him as Medical Director of the Sanatorium, says: "I am sure you will agree with me that the first thing is a **man**. With a strong, competent man at the head of affairs, the simplest building makes a strong sanatorium; without it, the most elaborate is useless." We thoroughly agree with Dr. Minor's reasoning, and because we do, we know that the absolute success of the State Sanatorium is henceforth assured. We have the man.

Allow me just a few words to introduce Dr. Pendleton, and then, I shall let those who speak with authority tell you how well qualified he is to take care of our patients. Dr. Pendleton is a Southern man and was educated at the University of Virginia.

He looks to be about twenty-eight or thirty years old. After graduating at the University of Virginia in medicine, he was assistant to Dr. Watts, Professor of Surgery in the hospital connected with that Institution. Serving under Dr. Watts, he contracted tuberculosis, went to Saranac Lake and was cured. Like most specialists in tuberculosis, he became interested in and took tuberculosis as his specialty as a result of his personal experience with the disease. After regaining his health at Saranac Lake, and incidentally after learning the methods of cure practiced in that well known Institution, he accepted an assistantship with Dr. David R. Lyman, of the Gaylord Farm Sanatorium, the State Institution at Wallingford, Connecticut, where he served three years, for five months of the time having absolute charge of that Institution. From the Gaylord Farm Sanatorium, he went to the Hope Farm Sanatorium, Marshallton, Delaware, to take charge of that Institution.

What Others Say of Dr. Pendleton.

Dr. Livingston Farrand, Executive Secretary of the National Association for the Study and Prevention of Tuberculosis, who is qualified to take a comprehensive view of the tuberculosis problem as a national problem, writes concerning Dr. Pendleton: "I have made further inquiries concerning Dr. Wilson Pendleton, * * * with reference to his administrative capacity and general availability for the position you have in mind with your department. I have this morning received a letter from Dr. David R. Lyman, of Gaylord Farm Sanatorium, Wallingford, Conn., who says that Pendleton had entire charge of that sanatorium during an absence of Dr. Lyman's lasting for five months, and in addition to that he was with him as an assist-



ant for two and a half years. He says he is an excellent disciplinarian and a man who makes friends wherever he goes. He has plenty of enthusiasm, but does not let it run away with his judgment, and he thinks decidedly that he would make good in such a position as that you have in mind.

"I am inclined to lay great stress on Lyman's opinion, for his own sanatorium is one of the best managed in the country and its standards are peculiarly high. I think it would be decidedly worth your while to get in touch with Pendleton and look him over. He is, all things considered, the strongest man of whom I know at present.

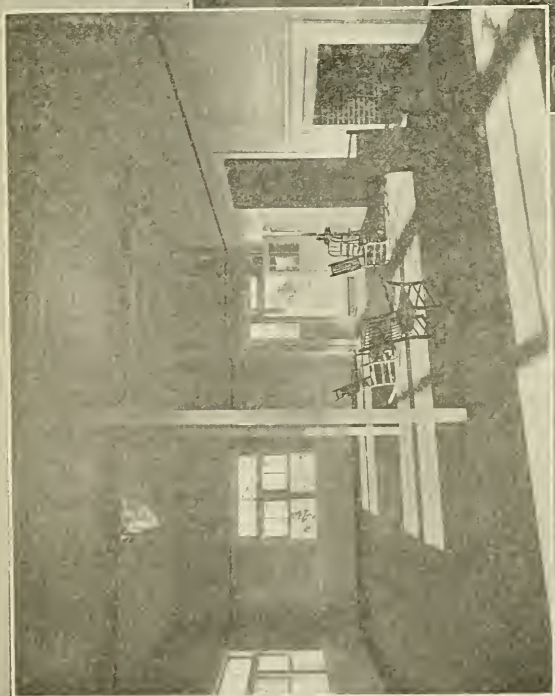
"I can give you a list if you care for it of half a dozen other names of men who are looking for positions, but none of them are as highly recommended as Pendleton."

Dr. David R. Lyman, Superintendent of Gaylord Farm Sanatorium, a man known to all authorities on tuberculosis and sanatorium work in this country as one of the foremost authorities on this disease and in sanatorium experience, says of Dr. Pendleton: "Dr. Pendleton was with me for nearly three years, prior to that time having been first assistant to Watts at the University of Virginia. When he came to me Watts wrote me that I was getting the best man that he had or knew of. When he left me at the end of three years I was ready to make the same remark about him. His medical work is of the best. He is a good disciplinarian and is a man who makes a very good impression on the people whom he meets casually. If you find a better one for the position you are indeed to be congratulated."

Dr. Chas. L. Minor writes: "* * * Coming now to the purpose of my letter, my friend, Dr. David Lyman, of the Connecticut State Sanatorium at

Wallingford and one of the best in this line in the whole country, has written to me about his former assistant, now in charge of the Delaware State Sanatorium, Dr. Pendleton. * * * While I do not know him [Dr. Pendleton] personally, I know Dr. Lyman so well as a man of high character and great ability, and the fact that he has written to me endorsing him [Pendleton] in the highest terms as an A1 man satisfies me of his unusual competence for the place. * * * Having had experience in so admirably conducted a sanatorium as Wallingford, which, from my personal experience, I consider the best even in the country, and then more recently in Delaware, Dr. Pendleton should be an excellent man for the place. Trusting you will give his application most serious consideration, I am, with best wishes for the success of the new sanatorium, etc."

Another well known North Carolina authority on tuberculosis, Dr. Wm. Leroy Dunn, Asheville, N. C., writes: "I have received a letter from my friend, Dr. David R. Lyman, stating that he had recommended to your consideration Dr. Wilson Pendleton, who was formerly his assistant, for the place of House Physician at the State Sanatorium. I think I met Dr. Pendleton a few years ago when I was at Wallingford, but on any impression obtained at that time I would not place any weight. However, I would give the greatest weight possible to any recommendation made by Dave Lyman. I do not know whether you know him personally or not. If not, you have missed a lot. Lyman is one of the very best men in this line of work in this country. He has been very successful at Wallingford, besides you can count absolutely upon every word he says, and any man that he would recommend for the place would be in every sense persona grata to Minor and myself, and to any of those men



Interior View of Club House.



Office and Laboratory.

with whom we are more intimately associated in Asheville."

Mr. A. R. Kimball, Chairman of the Executive Committee of the Gaylord Farm Sanatorium, writes: "I take great pleasure, as Chairman of the Executive Committee of Gaylord Farm Sanatorium, in testifying to the ability and high character, the conscientiousness and close application to duty, which characterized Dr. W. Pendleton while for two years and a half he was assistant to Dr. Lyman, Superintendent of Gaylord Farm Sanatorium. For nearly four months Dr. Lyman was incapacitated, being in Charlottesville, Va., recovering from a very severe operation which all but cost him his life. During this time, Dr. Pendleton was in full charge and the credit of carrying on the work of the Sanatorium is in largest part his. From my close personal experience, as I am really the business head of Gaylord Farm, I do not think the Sanatorium of North Carolina could secure a better man than Dr. Pendleton."

Miss Emily P. Bissell writes: "As President of the Delaware Anti-Tuberculosis Society, I take pleasure in

heartily recommending Dr. Pendleton, and I hope that you may be able to secure him."

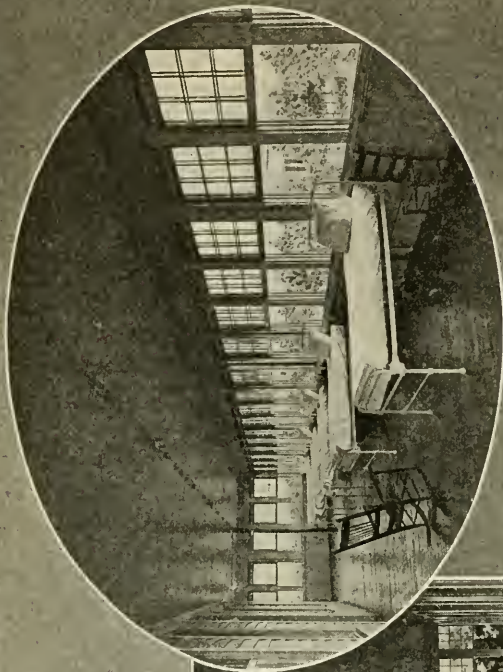
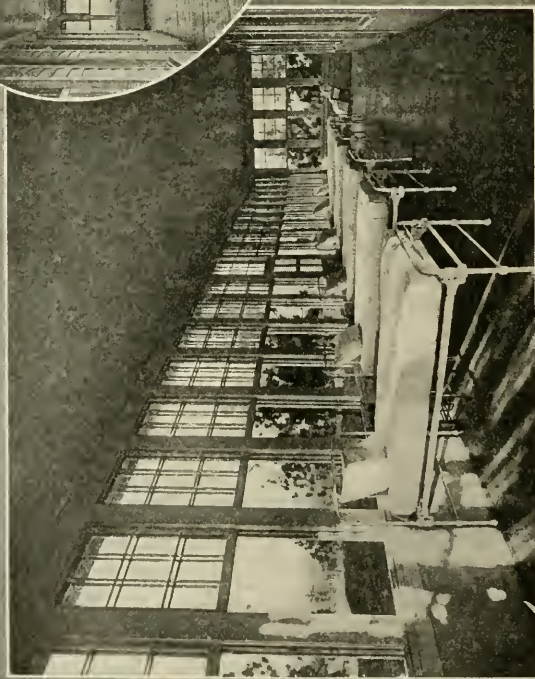
Finally, Dr. Laurason Brown, Saranac Lake, New York, writes: "Dr. Pendleton is a competent man, and I think you could get no one better than he. I would strongly urge you to take him."

BUSINESS MANAGEMENT.

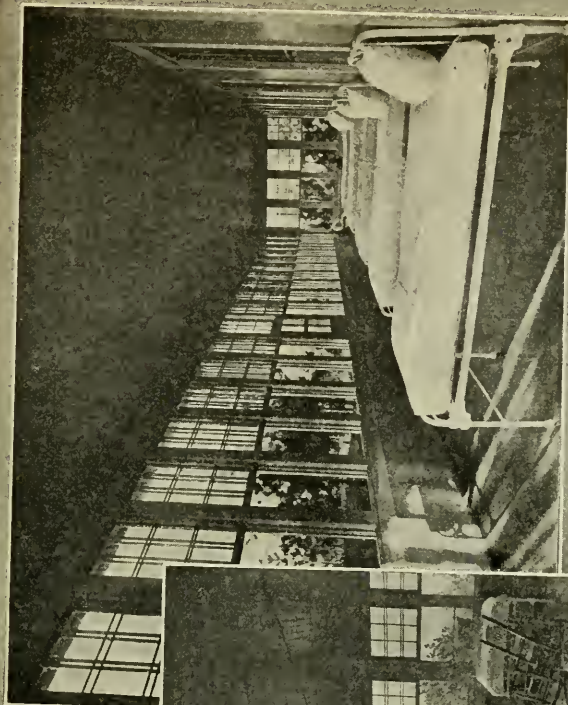
The business manager of the Sanatorium, Mr. Tyre Glenn, who has given entire satisfaction in that office for the past two years, and who is sufficiently well known throughout the State not to need introduction, will be retained in office.

Mr. Glenn will have charge of the thirteen-hundred-acre farm, the buying of supplies, the employment of labor, and the bookkeeping of the Institution.

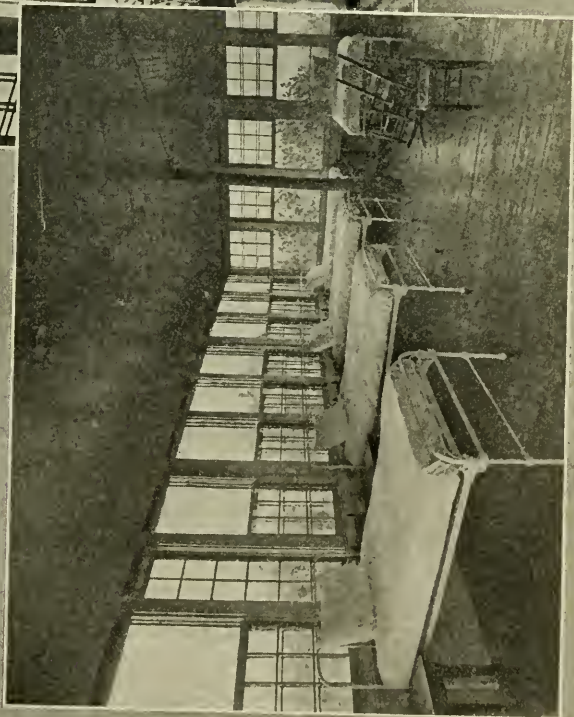
Dr. Pendleton will have absolute charge of the medical work of the Institution. His official title will be Medical Director. He will employ his own nurses and orderlies, admit and dismiss patients, and prescribe diet, exercise and daily habits for the patients.



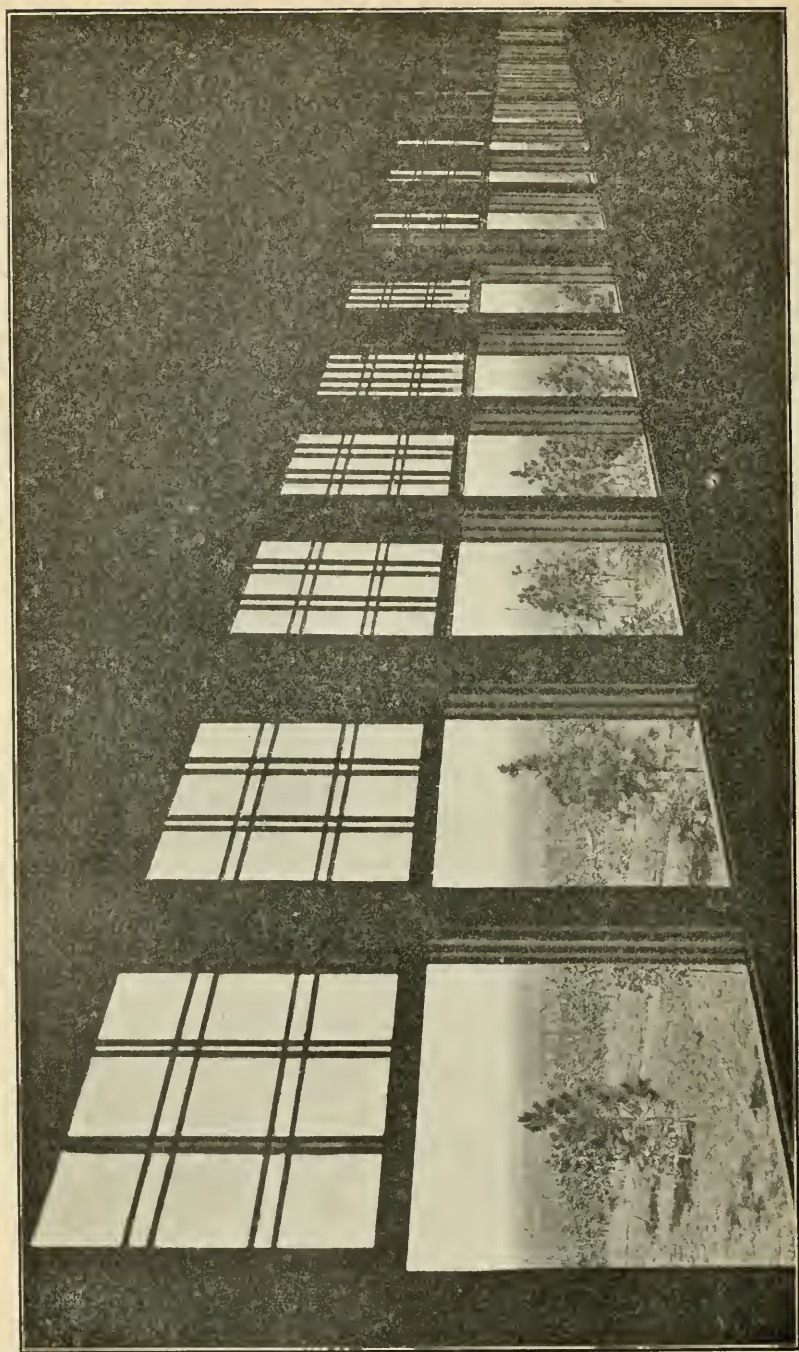
Here is Where the Patients Sleep Out-of-doors. Except in a Rain, with Wind, Windows Stand as Shown.



Looking out Over the Park Towards Fayetteville.



Windows are Dropped from the Top During High Wind.



Looking Towards Fayetteville.



The Health Bulletin

Published by THE NORTH CAROLINA STATE BOARD OF HEALTH

This Bulletin will be sent free to any citizen of the State upon request.

Published monthly at the office of the Secretary of the Board, Raleigh, N. C.
Entered as second-class matter at Postoffice at Raleigh, N. C., under Act of July 16, 1894.

Vol. XXVIII.

DECEMBER, 1913.

No. 9.

W. B. CAMERON,

STAGSVILLE, N. C.



MASTER ROBERT ROYAL SMITHWICK, CHAMPION BABY, RECEIVING HIS GOLD MEDAL FROM SECRETARY OF STATE J. BRYAN GRIMES.

CONTENTS

FREE PUBLIC HEALTH LITERATURE	156
EDITORIAL JOTTINGS	157
FACTS ABOUT THE OXYPATHOR	158
REPORT ON THE BETTER BABIES CONTEST	165
THE PHILOSOPHY OF COLD FEET	170
OUR WHOLE TIME COUNTY HEALTH OFFICERS	173
FACTS ABOUT COLDS	174
PROVIDENCE NOT TO BLAME	175
WHEN AND HOW TO BATHE	176
THE PRESS ON THE OXYPATHOR	177
TOBACCO AND ALCOHOL	177
COLLIER'S ON THE OXYPATHOR	178

FREE PUBLIC HEALTH LITERATURE

The State Board of Health has a limited quantity of health literature on the subjects listed below, which will be sent out, free of charge, to any citizen of the State as long as the supply lasts. If you care for any of this literature, or want some sent to a friend, just write to the State Board of Health, at Raleigh. A post card will bring it by return mail.

- | | |
|--|--|
| No. 9. Medical Inspection of Schools and School Children. | No. 27. The Whole Time County Health Officer. |
| No. 10. Care and Feeding of Babies. | No. 28. Typhoid Fever. |
| No. 11. The Plague of Flies and Mosquitoes. | No. 29. Rules and Regulations for County Boards of Health. |
| No. 12. Residential Sewage Disposal Plants. | No. 30. Measles. |
| No. 13. Sanitary Privy. | No. 31. Whooping Cough. |
| No. 14. Hookworm Disease. | No. 32. Diphtheria. |
| No. 15. Malaria. | No. 33. Scarlet Fever. |
| No. 18. Tuberculosis Leaflet. | No. 34. Smallpox. |
| No. 19. Compilation of Public Health Laws of North Carolina. | No. 35. Some Light on Typhoid. |
| No. 20. Tuberculosis Bulletin. | No. 36. County Health Work on an Efficient Basis. |
| No. 21. Fly Leaflet. | Anti-Spitting Placards (11 inches by 9 inches). |
| No. 22. Baby Leaflet. | Anti-Fly Placards (11 inches by 19 inches). |
| No. 23. The Vital Statistics Law. | |
| No. 25. Typhoid Fever Leaflet. | |

THE Health Bulletin



PUBLISHED BY THE NORTH CAROLINA STATE BOARD OF HEALTH

J. HOWELL WAY, M.D., *President*, Waynesville.

RICHARD H. LEWIS, M.D., Raleigh.

J. L. LUDLOW, C.E., Winston-Salem.

W. O. SPENCER, M.D., Winston-Salem.

THOMAS E. ANDERSON, M.D., Statesville.

W. S. RANKIN, M.D., *Secretary and Treasurer*, Raleigh.

CHARLES O'H. LAUGHINGHOUSE, M.D.,
Greenville.

EDWARD J. WOOD, M.D., Wilmington.

A. A. KENT, M.D., Lenoir.

CYRUS THOMPSON, M.D., Jacksonville.

Vol. XXVIII.

DECEMBER, 1913.

No. 9.

EDITORIAL JOTTINGS

The January number of the HEALTH BULLETIN will be our almanac number. It promises to be one of the best numbers we have issued. Be on the lookout for it.

If you have time to read but one article in this issue, by all means let that article be the one about the exposure of the Oxypathor. If you don't learn something, besides have a smile or two coming before you get through with it, cancel your subscription to the BULLETIN and demand your money back.

This month the State Sanatorium for the treatment of tuberculosis, at Montrose, pens under the direction of the State Board of Health. Only incipient and moderately advanced cases can be admitted. The capacity of the institution at present is only fifty beds. For further information regarding admittance write to the Secretary of the Board, at Raleigh.

According to a newspaper account, the Oxypathor Company claims that since this Board exposed their gas pipe fraud their sales have increased greatly. If that is true, why does this company object so strenuously to being exposed? Such statements remind

us of liquor people, who when voted out of a territory brazenly declare that they sell more liquor there than they did before.

Don't close your bedroom windows these nights just because it is cold. Your lungs need just as much pure, fresh air as they did last summer, when your bedroom didn't seem to have half enough windows. The whole secret is in keeping warm at night. Dress warmly and sleep comfortably, if you have to wear heavy woolen sox and a suit of underwear, besides thick, warm pajamas. Then don't pile on thick comforts that feel heavy, but use lots of light, warm blankets. Keep warm at all hazards, and then *sleep with your windows open.*

Some time ago we offered to loan lantern slides and stock lectures to those who desired to use them, if they would pay the transportation charges. Since that time we have been completely swamped with requests for the loan of the slides and lectures we then had, and now we are preparing other similar lectures on consumption, patent medicines, care of the eyes, ears, nose and throat, and others. If you want them, write early.

FACTS ABOUT THE OXYPATHOR

How Six Inches of Nickel-plated Gas Pipe
Sells for \$35.00

ANY ONE CAN MAKE HIS OWN OXYPATHOR

How and Why the State Board of Health Laid Bare
the Modern Rabbit's Foot

WARREN H. BOOKER, C. E.

"Save the babies!" How? With six inches of brass gas pipe and a handful of sand, sulphur and charcoal. This is what our good mothers were told to do a few weeks ago at the State Fair. Of course, they were not told in just those words. They were invited to pay \$35 for an Oxypathor, which is the same thing, except that the latter has a green cord fastened at each end of the gas pipe.

Now, when any concern sets up an exhibit directly opposite a better babies contest and proceeds to make capital of innocent babies, claiming that a piece of gas pipe will cure some one hundred and seventy odd ailments, and recommending its use in cases of pneumonia, infantile paralysis and diphtheria, it is time for some one to sound a note of warning. In the case of diphtheria time is worth more than money. In many cases time is life itself, and no honorable, intelligent person will, for greed of a few paltry dollars, take chances with the lives of innocent babes by recommending the wasting of precious time with a piece of gas pipe instead of hurrying to apply anti-toxin.

What the Oxypathor Is.

That the public might know just what they are getting when they buy Oxypathors, the State Board of Health, through its agent, bought an Oxy-




pathor of the Carolina Oxypathor Company, for which it paid \$35. Professor Browne, professor of physics and electrical engineering at A. and M. College, Raleigh, was then asked to examine it for any and every known force. The most delicate tests failed to show that any force whatsoever was generated or transmitted by the apparatus when tested according to the directions given in the Oxypathor "Direction Book" accompanying it. Professor Browne was then asked to take it apart and find how it was made. The carefully milled caps at either end might indicate that they could be unscrewed. Not so. A vigorous application of wrenches and pipe tongs failed to loosen them. The gas pipe was then sawed open, and was found to contain about a handful of black, gritty powder. Perhaps for the purpose of reinforcing the caps at either end, a solid bar about one-half inch in diameter extended through the pipe from cap to cap. The powder found in the pipe was turned over to Prof. W. A. Withers, professor of chemistry at A. and M. College, with the request that he examine it. His report shows that it consists of


Carbon (free)	28.36%
Silica	27.46%
Carbon Dioxide	8.37%
Magnesium Oxide	7.61%
Antimony	7.26%
Aluminum Oxide	5.65%
Sulphur	4.97%

Ferric Oxide	4.48%
Potassium Oxide	3.81%
Moisture	1.75%
Nitrogen	0.28%

Professor Withers further states that "the substance, in the main, appears to be probably a mixture of coal dust, clay, sand, antimony sulphide, and magnesium carbonate."

That, in a nutshell, is the story of the Oxypathor. The accompanying cut shows how the Oxypathor was exposed at the State Fair. Attached to the upper left-hand chart is the original Oxypathor bought of the Carolina Oxypathor Company for \$35. In the bottle attached is some of the

ORIGINAL OXYPATHOR
BOUGHT FROM THE
CAROLINA OXYPATHOR CO.
COST \$35.00
THE GAS PIPE 
AND THE
WORTHLESS POWDER
 **FOUND INSIDE** 

DON'T BUY AN OXYPATHOR
UNTIL YOU
See Our Substitute
PRICE 10¢
AND
JUST AS GOOD.

State Board Of Health's
Substitute FOR
OXYPATHOR.

GAS PIPE FRAUD EXPOSED!
SEE WHAT
A SCIENTIST SAYS
ABOUT
OXYPATHOR
LETTER TO PROF. BROWNE AND HIS REPLY

"SAVE THE BABIES,"
BUT
Don't Waste Your Money
ON
A Gas Pipe Fraud.
IS THE
ADVICE
OF THE
State Board
OF
Health.

Four charts used in exposing the Oxypathor fraud at the State Fair. Note the original Oxypathor sawed in two and attached to the upper left-hand chart, and the old tin can and shoestring substitute opposite:

worthless black powder found in the gas pipe, the composition of which has already been referred to.

To the lower left-hand chart are attached the writer's letter to Professor Browne, asking him to examine the Oxypathor, and Professor Browne's reply, stating that there is absolutely nothing of value in the device, so far as its ability to generate or transmit any known force whatever is concerned. The two letters are reproduced herewith in full.

RALEIGH, N. C., October 18, 1913.

PROF. WM. HAND BROWNE, *Professor of Physics and Electrical Engineering, N. C. College of Agriculture and Mechanic Arts, Raleigh, N. C.*

DEAR SIR:—Under separate cover I am sending you today one Oxypathor purchased this morning from the Carolina Oxypathor Company, of this city, at a cost of \$35. I shall thank you to examine this apparatus for any and every known physical, chemical or other force which it is possible for this instrument to generate or transmit along a wire or cord when used as directed in the accompanying book of instructions, and advise me as to your findings in this respect.

I wish, furthermore, that after making such examination you would take the apparatus apart and carefully examine the contents and advise me as to your findings.

Respectfully yours,

WARREN H. BOOKER,
Chief Bureau of Engineering and Education, North Carolina State Board of Health.

RALEIGH, N. C., October 21, 1913.

MR. WARREN H. BOOKER, *Chief of Bureau of Engineering and Education, North Carolina State Board of Health, Raleigh, N. C.*

DEAR SIR:—Pursuant to your instructions under date of October 18th, I carefully examined and tested the Oxypathor according to your instructions and according to the directions accompanying the apparatus.

Tests for magnetic effects showed that this apparatus has no magnetic properties whatever.

Testing for electrical effects failed to indicate the slightest electrical action—indeed, the construction of the apparatus makes such action impossible.

These are the only two forces which could be brought into action by means of the device, and hence my tests have shown that the device, even when packed in crushed ice, causes no action whatever.

I have furthermore opened the so-called electrode and find that it consists of a brass cylinder, through which passes a copper bar firmly attached to the ends of the cylinder. The space between was filled with blackish, inert, gritty powder, which, due to the construction of the so-called electrode, can produce no magnetic, electrical or other action. In my opinion there is absolutely nothing of value in the device so far as its ability goes to generate or transmit any known force whatever.

Very truly yours,

W. HAND BROWNE,
Professor of Physics and Electrical Engineering, A. and M. College.

Then, to show the utter absurdity of the whole thing, to the upper right-hand chart is attached an old tin can with shoestrings tied to either end. The State Board of Health guarantees that this can will have just as much action as the Oxypathor, and net the purchaser a neat little saving.

In the lower right-hand chart is quoted the slogan "Save the babies," appropriated by the Oxypathor Company, which they displayed directly opposite the Better Babies Contest. To this the State Board of Health added the advice, "But don't waste your money on a gas pipe fraud."

It is needless to say that the whole Oxypathor business is a fake from beginning to end. It simply illustrates the credulity of a few of our people. It illustrates how a gigantic lot of untruths and absurdities repeated thousands of times by printer's ink can mislead a few sick or near sick who are gullible enough to believe such extravagant claims when accompanied by a

mysterious looking, highly polished apparatus, surrounded with high-sounding words unknown to science or the dictionary writers, and especially when reinforced by a lot of testimonials from users, many of them prominent people, who report marvelous cures.

Cures and Testimonials.

This brings up another interesting phase of this and many similar patent medicine frauds, the cures and testimonials. Some one says, "If it is a fake, what about all those cures and testimonials?" That is easy. Did you ever stop to consider that at least ninety-five per cent of all the aches and pains and sickness that you or anyone else ever had, or thought you had, got well? You never had a headache or a toothache that didn't get well, if you gave it time enough. And what's more, you never will have but one fatal case of sickness, and after that is over there will be no testimonial forthcoming. This gives a very wide margin of ills and near ills that get well from natural causes, frequently even in spite of patent medicines, Oxypathors or old tin cans and shoestrings; and this wide margin is where the Oxypathor and similar industries flourish.

Take a case where some one has \$35 worth of faith in an Oxypathor (that's some faith these days), and buys one. Now, if that person has enough faith in a piece of gas pipe to spend \$35 for it, it goes without saying that he believes it is going to cure him of whatever he has or thinks he has. Otherwise he would not have bought it. To be sure, in 95 cases out of 100 he gets well, and such a person would not be true to himself if he did not declare that it was the Oxypathor that cured him. For such people the Oxypathor is simply a high-priced faith cure, but it is not so advertised. The negro who cannot afford an Oxypathor

uses a rabbit's foot to equal advantage, and some people use buckeyes, but no one has capitalized or has a monopoly on rabbits' feet or buckeyes.

But does that prove that the Oxypathor cured this person? What about the thousand and one natural causes? What about people, perhaps this very person himself, who recovered from this same trouble three years ago, before the advent of this marvelous instrument? We defy anyone to prove, in all the advertised cures and testimonials, that a single cure was in any manner whatsoever due to any action of the Oxypathor. The fact that the Oxypathor has been palmed off on people that are very susceptible to mental suggestion is shown in the fact that since the exposure of the fraud people who used them have confided to the writer, "I did think it helped me, but since I found out what it is, it doesn't do me a bit of good." Was it Barnum who said, "The American people like to be humbugged"?

Now, let us be serious just a moment and look at this testimonial business from a common-sense viewpoint. How about your family physician? When he treats you, does he come around after you get well and ask you for a testimonial? What would you think of him if he did? How about your preacher? Does he advertise in the newspapers or publish a pamphlet telling what nice things his other congregations said about his preaching? Does your dentist or lawyer have to drum up trade by means of testimonials? What would you think of them if they did? Did any really great invention or discovery have to resort to such means year after year to make the public accept it? If the Oxypathor really were such a good thing as it is said to be, don't you think everybody would

have known about it long ago? Do you suppose the newspapers would have to be paid to carry ads., or do you suppose that any of the newspapers would decline to carry such matter in their columns? The truth of the matter is that the testimonial feature is one of the tell-tale, weakest features of the whole business. When that feature is worked so hard, and particularly when no testimonials are published from people who were not benefited by the use of an Oxypathor, does it not begin to look as though there were something radically wrong? Further inferences regarding testimonials we leave to the reader.

Some one says, "Well, if it is a fake, why doesn't the State Board of Health stop their selling such things?" That is also easy. In the first place, this is not our business. We know of no state law giving us power to prohibit this or any other fake whatsoever from operating in North Carolina. However, when an effort was made to capitalize a better babies contest in order to exploit such a thing, we felt it our duty to immediately brand it what it is, a fake and a fraud. In the second place, we have exposed it, and if you waste your money on it, that is your business. However, for your benefit it may be said that if you have been innocently duped into buying one of these fakes and want your money back, and are willing to go on record in court, the Attorney-General is of the opinion that you can have your money refunded. Last of all, we have branded it a fake. We could not do so with safety and impunity were it not so, because such a charge is open to refutation in court, and we invite those who contend otherwise to have it settled in the courts if they do not accede to our charge.

The Joke Book.

Even the shortest exposé of the gas pipe fraud would be incomplete without one or two passing references to that prize joke book, otherwise known as the "Oxypathor Direction Book," which accompanies the Oxypathor and is the mouthpiece for the device. In this book the happy possessor is assured over and over again of the almost miraculous curing and healing power of his \$35 acquisition. He is told that "The Oxypathor gives to its possessor practical mastery over all forms of dangerous infection," and that "The diseases which the Oxypathor will not cure are easy to enumerate, because they are comparatively few."

In the index of this wonderful volume one finds listed something over 170 human ailments for which the Oxypathor is recommended. This list of ailments extends from headache to heart disease, from diphtheria and d afness to dropsy and dyspepsia, from boils, burns and bruises to paralysis, piles, pregnancy and pellagra. In fact, if one could read this book believably he might have visions of making Methuselah look like a youth, if, indeed, he should ever find it necessary to die at all.

And how does the Oxypathor cure all these things? We quote one or two directions just as samples. Toothache being a short one, we quote it in its entirety:

"*Toothache*—generally due to exposure of the sensitive interior portion of the tooth after the loss of the non-conducting enamel, or to an inflamed or diseased nerve root. A simple toothache is sometimes relieved by placing disk at Strong Force under hot compress over the aching spot."

The strong force referred to simply means placing the gas pipe in cold water. But note the hot compress.

That is a time-worn remedy for tooth-ache that was ancient even to our grandmothers. They used bags of hot sand or salt, or even a hot iron, when a "cold settled in a tooth," with excellent results. Now why, in this day and age, should we give the credit for such a cure to a nickel-plated gas pipe? Certainly some of us do like to be humbugged.

Constipation is one of the subjects treated at length in the joke book. Some four pages are devoted to this subject. We quote again:

"There is but one true way of overcoming and curing constipation, and that is to begin at the fountain-head or source of the difficulty. Every one afflicted with constipation should take an inventory of his daily habits as to breathing, eating, drinking and exercise, and correct the faults that he sees have brought about his condition."

Now, it is a matter of common knowledge that such a course will cure most cases of constipation without further treatment. But note what follows:

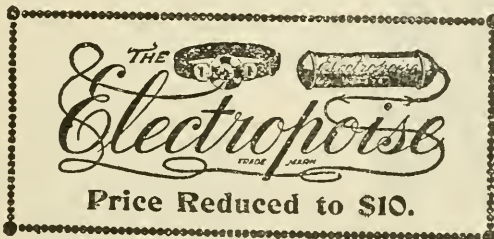
"While correcting the causes of his constipation, which the patient can and must do in order to be *permanently cured*, let him adopt the following program: Apply the Oxypathor at Strong Force with one disk over the liver at lower margin of right ribs and cover

abdominal surface with cold water or apply, with the disk removed, a cold compress for 2 or 3 minutes."

And so it goes on giving the time-honored treatments for constipation, including proper habits and diet, hot and cold compresses, fruit and a glass of cold water before breakfast, and so on, but never failing to have the Oxypathor applied in some spectacular way in every instance. And yet some people can be persuaded to pay \$35 for a piece of gas pipe and for such information, which they have been taught or should have been taught from childhood up. In this joke book there are enough simple home remedies our grandparents taught us, together with a little everyday hygiene and sanitation that the average school-boy ought to know, to remedy the minor ailments, but the constant reference to the Oxypathor misleads people easily susceptible to suggestion to attribute their recovery to the Oxypathor, instead of to the real cause.

History of the Fraud.

The Oxypathor has an interesting genealogy and a varied history. We have examined its family tree for several short generations, and all branches lead to the fertile brain of one Hercules Sanche, who oscillated



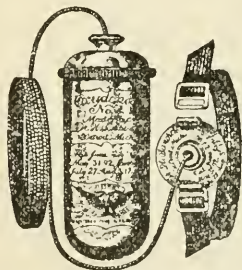
The Electropoise advertisement which used to appear in our magazines and Sunday School literature: The gas pipe was empty.

with hot compress. Treat for 20 or 30 minutes twice a day, morning and night, and during the treatments, at intervals of 10 minutes, or immediately after the treatments, sponge the

from Port Gibson, Miss., to Detroit, New York, Chicago, and back to Detroit. In 1890 Sanche invented the "Electropoise." Many people will still

recall that some eighteen or twenty years ago this fake was advertised in many of the popular magazines. To refresh the memory of our older readers, and for the information of our younger readers, we reprint a picture of the Electropoise that used to accompany many of these ads. The "Electropoise" was simply an empty metal cylinder about three and one-half inches long, called the "Polizer." To the end of this cylinder was attached a cord which terminated in a small disc which was to be secured to the ankle or wrist by means of an elastic band. According to the inventor of the "Electropoise," there was apparently no disease, known or unknown, that it would not cure.

About 1896 Sanche got out a revised edition of the Electropoise which he termed the "Oxydonor." There were two principal points of difference between the Electropoise and the Oxydonor. First, instead of being empty, the gas pipe, in the case of the Oxydonor, contained a stick of carbon; and, second, instead of selling for \$10, it sold for \$35. The accompanying cut shows the similarity of the two.

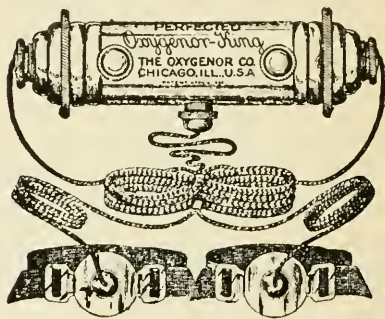


The revised edition of the Electropoise, termed the Oxydonor. It sold for \$35 and contained a stick of carbon.

Financially, the Oxydonor was a howling success, and as might be expected, imitators got into the game. This resulted in Sanche's bringing a suit against one imitation, the Oxy-

genor-King. It should be stated, however, that in this case the United States courts decided that Sanche's instrument was not of sufficient value to entitle him to standing in a court of equity.

The Oxygenor-King, a piece of gas pipe filled with sand, sulphur, charcoal, white lead and brass, had three cords attached and sold for \$25.



The Oxygenor-King, a competitor of the Oxydonor: It was filled with sand, sulphur, charcoal, white lead and brass, and sold for \$25.

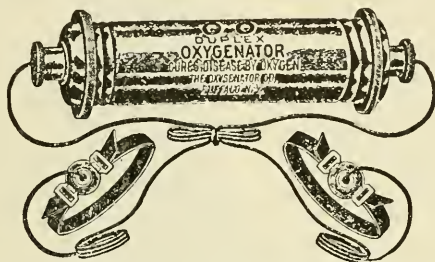
Of course, it was claimed to be capable of curing practically every human ill. In fact, it was said to possess complete mastery over "all curable diseases."

Space forbids our describing other similar fakes, such as the Oxytonor, the Oxybon, and others. Following close upon the heels of the Oxygenor-King came the Oxygenator. From the similarity of the names one would imagine that the courts could be invoked on the ground of infringement, but perhaps the promoter deemed it wise to remain out of the courts. The "OO Duplex Oxygenator," as this gas pipe was called, had but two cords and sold for from \$25 to \$35. In 1910 the Vermont State Board of Health examined the instrument under their pure food and drugs act, found it filled with iron filings, clay and coke dust, and prohibited its sale.

Since that date the name of this same fraud has been changed to the "Oxypathor." In fact, from the writer's desk can be seen on a window across the street the sign, "Carolina Oxygenator Company," placed there several years ago. At the main office of the Oxypathor Company, three blocks

the cat will jump next, or what this fake will be called next year, is a matter of conjecture. As a suggestion, however, it might be mentioned that in one of the closing paragraphs of the joke book an OOO Animal Oxypathor is described as follows:

"This instrument is made with the



Following close upon the heels of the Oxygen-King came the Oxygenator. Since the Vermont State Board of Health prohibited the sale of this fraud the name has been changed to Oxypathor.

away, the device is now known altogether by the name of "Oxypathor." In other words, just enough change has been made in the name to evade the law, but the window sign on the old office, now used for other purposes, has not been kept up to date.

Such, therefore, is the story of the Oxypathor up to this time. Which way

same conscientious care that distinguishes the OO Duplex Oxypathor. For stock growers the Animal Oxypathor is invaluable. Price, \$50."

At least this is not a poor man's fraud, and we must give the promoter credit for commercializing the fact that many persons care more for their pets than for themselves.

REPORT ON THE BETTER BABIES CONTEST

WARREN H. BOOKER, C. E.

The Better Babies Contest at the State Fair is now history. This and similar contests all over the State mark the first chapter in the history of the development of a proper appreciation of the value and importance of child life. The babies and the children are beginning to come into their own. Yesterday no one ever dreamed of a Better Babies Contest. Today we are having them. Tomorrow they will continue, and soon our better babies will have become better school

children, largely on that account and on account of medical inspection of schools. The next step will be better citizens.

In the meantime, no doubt there will be better mothers contests and better parents contests, and the end is not yet. A tremendous movement has been launched unconsciously.

At the State Fair entries were made for every five minutes of the four days, but so many mothers wanted to enter their babies that they had to

be admitted every two minutes. Nearly four hundred entries were made. Cold weather and heavy rain kept over one hundred babies from attending. Requests for entry next year have already been made.

The arrangements at the Fair Grounds, while the best to be had, were, of necessity, crude and woefully inadequate. Furthermore, no one connected with the contest had ever had similar experience. Every one who assisted with the work did it out of goodness of heart, without a cent of pay or the hope of reward.

Of course, with such a rush and under such conditions, errors were made and the work was of necessity superficial, but now that something is known about such contests we are confident that next year the contest will be much larger and much better in every way. For instance, as it was, many different people assisted at different times, and of course this necessitated the loss of much valuable time and many opportunities for valuable work in learning just what each person was to do. Next year, as far as possible, the same persons will help throughout the entire contest. We wish it might be possible to pay at least the doctors and nurses. This would insure more uniform work, and work which could be done under strict uniform supervision.

But a beginning had to be made, and judging from the enthusiasm of the Fair visitors, the public press, and especially from the mothers, even the beginning was a first-class success. Many mothers have written since in regard to remedying some of the defects pointed out at the contest. In many instances doctors and nurses were able to offer, at various points in the contest, valuable advice and suggestions in regard to the care and feeding of the babies, which might

have been strongly resented at other times.

A few pessimistic persons were heard to prophesy that such a contest would engender the hardest kind of feelings, as every mother thought her baby was the prettiest baby in the State. Of course, these people were mistaken. They knew absolutely nothing about a health contest. They had nothing to base their opinion on but the old-fashion beauty show and voting contest. Of the nearly three hundred babies judged, only two inquiries were made in regard to why a baby was not scored higher, and in only one instance was the question of unfairness raised. We are glad to say that in each case the score card plainly set forth the facts of the case, and when defects were found the score card indicated the amount to be deducted.

In the case of a health contest, nearly every mother comes not with the expectation of having the prettiest baby in the State, which she is still free to believe if she cares to, but to have her baby's physical defects pointed out; to learn how he measures up with normal babies of that age, and, so far as possible in the short space of time permitted, to learn just what to do to remedy these defects.

Those entering the contest had the graciousness to recognize that as they had paid no entry fee, as all those assisting in the work were doing it out of the kindness of their hearts, and as the prizes were just so much more that there was a chance of winning, they had little room for complaint, and much reason to be grateful. Expressions of thanks have been received from a great many parents whose babies were examined and from those who won prizes at the contest. We cannot refrain from quoting just one at this point, as it is typical of many others:

FIRST PRIZE BABY



ROBERT ROYAL SMITHWICK
Wendell

Age, 33 months. Score, 99.9.

DEAR SIR:—I am just in receipt of letter informing me that my baby won a prize in the Better Babies Contest at the State Fair, and inclosing check. Please accept my sincere thanks, which I desire to extend to all who helped make this good fortune possible.

Much as the prize is appreciated, however, I am still more grateful for the physical examination which was given my baby.

I can partially understand the difficulties with which your department had to contend, and feel that you deserve great credit for the work done.

Before knowing that my boy won a prize, I was wholly satisfied; now I can only say that I am delighted, indeed.

Most sincerely,

MRS. * * *

So much interest was manifested in the prize winners that we reprint herewith the complete list of prize

winners and their scores, as well as the pictures of the four champion babies.

CHAMPION BABIES

1st, Robert Royal Smithwick, Wendell.....	99.9
2d, Dick Hester Frazier, Bahama.....	99.8
3d, Charles Aycock Poe, Raleigh.....	99.7
4th, Calvin Nelson Murray, Raleigh.....	99.6

The regular prize winners and their scores are as follows:

Raleigh Division

Class 1.—(Boys over 6 months and under 24 months of age.)

1st, Charles Aycock Poe.....	99.7
2d, David Graham McLeod.....	99.5
3d, Henry Hadley Dalton, Jr.....	99
4th, R. Horace Porter.....	98.5

Class 2.—(Boys over 24 months and under 36 months of age.)

1st, Calvin Nelson Murray.....	99.6
2d, Junius Earl Goodwin, Jr.....	98
3d, Alston Grimes.....	97
4th Hyman Mewborn Bizzell.....	96.8

SECOND PRIZE BABY



DICK HESTER FRAZIER
Bahama

Age, 18 months. Score, 99.8.

THIRD PRIZE BABY



CHARLES AYCOCK POE
Raleigh

Age, 6 months. Score, 99.7.

Class 3.—(Girls over 6 months and under 24 months of age.)

1st, Annie Katherine Riddle.....	99
2d, Martha E. Castlebury.....	98
3d, Lucile Johnson.....	97.2
4th, Eleanor Kennedy.....	97

Class 4.—(Girls over 24 months and under 36 months of age.)

1st, Jean Powell Farabee.....	97.5
2d, Allie McIlwain Scott.....	97
3d, Jeanie K. Brown.....	96
4th, Dorothy Pooshe.....	93.5

Wake County Division

Class 1.—(Boys over 6 months and under 24 months of age.)

1st, James Henry Mitchell, Wake Forest.....	99
Raymond Wingate Allen, Apex.....	97.5
Theo. Bunyan Davis, Jr., Cary.....	97.5
(These two babies tied for second prize.)	
4th, Vernon Woodrow Sherron, Morrisville.....	96

Class 2.—(Boys over 24 months and under 36 months of age.)

1st, Robert Royal Smithwick, Wendell.....	99.9
2d, William A. Green, Morrisville.....	96.5
3d, Wayland Seagroves, Holly Springs.....	95.5
4th, Stanley Hamerick, Wendell.....	93.5

Class 3.—(Girls over 6 months and under 24 months of age.)

Dorothy M. Tilley, Fuquay Springs.....	95
Virginia Green, Raleigh, R. 5.....	95
(These two babies tied for first prize.)	
Doris Whitaker, Cardenas.....	94.5
Minnie Gladys Simpkins, Raleigh, R. 5.....	94.5
(These two babies tied for third prize.)	

Class 4.—(Girls over 24 months and under 36 months of age.)

1st, Mary Jones Ragsdale, Fuquay Springs.....	95.5
2d, Rachel Frances Whitley, Wendell.....	94.5
3d, Mary Hudson House, Cary.....	94.2
(Only three examined in this class.)	

Eastern Carolina Division

East of Wake County.

Class 1.—(Boys over 6 months and under 24 months of age.)

1st, Edwin McHenry Norton, Maxton.....	98
2d, Walter Graham Lynch, Roanoke Rapids.....	97.5
3d, Samuel Parvin Hollowell, Goldsboro, R. 4.....	97
4th, Selby Lawrence Turner, Pink Hill.....	96.5

Class 2.—(Boys over 24 months and under 36 months of age.)

Turner Battle Bunn, Jr., Rocky Mount.....	96.5
Houghton Randolph, Washington.....	96.5
(These two babies tied for first prize.)	

FOURTH PRIZE BABY



CALVIN NELSON MURRAY,
Raleigh

Age, 29 months. Score, 99.6.

3d, Boyce Brooks, Enfield.....	95
4th, Ronald Jefferson Matlock, Hookerton.....	94

Class 3.—(Girls over 6 months and under 24 months of age.)

Ethel Inez Lee, Garner, R. 1.....	96.5
Elizabeth Moore McRimmon, Rowland.....	96.5
(These two babies tied for first prize.)	

3d, Kathleen Kimmell Miller, Oriental.....	96
4th, LaVenia Mitchener, Franklinton.....	95.5

Class 4.—(Girls over 24 months and under 36 months of age.)

1st, Eunice Smith, Kenansville.....	95
2d, Katherine F. Herring, Wilson.....	94.5
3d, Mattie McCullen, Henderson.....	94
4th, Delia McRimmon, Maxton.....	91

Western Carolina Division

West of Wake County.

Class 1.—(Boys over 6 months and under 24 months of age.)

1st, Dick Hester Frazier, Bahama.....	99.8
2d, Paul E. Russell, Biscoe.....	99.4
Robert Maynard Hobgood, Jr., Durham.....	97.5
Harvey Clegg Womble, Moncure, R. 2.....	97.5
(These two babies tied for third prize.)	

Class 2.—(Boys over 24 months and under 36 months of age.)

William Allen Kindel, Jr., Asheville.....	98
Robert Worth Wilson, Durham.....	98
(These two babies tied for first prize.)	
3d, William B. Morris, Gastonia.....	96
4th, Zalpheus Lakey Rochelle, Durham.....	94

Class 3.—(Girls over 6 months and under 24 months of age.)

1st, Lillie B. Bynum, Goldston.....	96.5
Elizabeth Elaine Baucom, Carthage.....	94.5
Alice Irma Hawkins, Oxford.....	94.5
(These two babies tied for second prize.)	
4th, Dorothy May Holt, Durham.....	93

Class 4.—(Girls over 24 months and under 36 months of age.)

1st, Virginia Adams Douglas, Greensboro.....	98
2d, Mary Frances Wagstaff, Chapel Hill.....	97.5
3d, Frances Elizabeth Carlton, Kernersville.....	97
4th, Ruth F. Phillips, Sanford.....	96.5

Even the briefest report of the contest would be incomplete without expressing publicly the debt of gratitude of the mothers, the babies, and those promoting the contest to all those who assisted so generously with their financial means, time, talent and services. We cannot enumerate all, but certainly the following contributors of prizes and prize funds should have prominent mention:

The *Woman's Home Companion*, of

New York City, which contributed \$100 in cash, besides valuable medals, certificates, score cards, literature on the care and feeding of infants, and much other assistance; the State Fair Association, which contributed \$100; the State Department of Agriculture, which contributed \$57 in prizes for country babies; and the following list of Woman's Clubs and personal contributors to the cause throughout the State:

Raleigh Woman's Club.
Wake County School Betterment Association.
Goldsboro Woman's Club.
Southern Pines Civic Club.
Southern Association of College Women, Raleigh Branch.
Mrs. M. T. Norris, Raleigh.
Carthage Civic Club.
Community Club, Chapel Hill.
Oxford Civic League.
Southport Civic Club.
Wilmington Sorosis.
Whiteville Civic League.
Greensboro Friday Afternoon Club.
Henderson Woman's Tuesday Club.
Henderson Civic League.
Greenville End of the Century Club.
Wadesboro Woman's Club.
Farmville Ladies' Magazine Club.

Besides this list of cash contributions, the following Raleigh merchants contributed special prizes for the Raleigh babies:

Tyree's Studio.
J. P. Hayes.
Hunter-Rand Company.
H. Mahler's Sons.
Jolly & Wynne Jewelry Company.
Dobbin-Ferrall Company.
Cross & Linehan Company.
Raleigh Banking and Trust Company.
Merchants National Bank.
Citizens National Bank.
Commercial National Bank.
Goodwin-Smith Furniture Company.
Boylan-Pearce Company.
Barber & Towler.
Weathers Furniture Company.
Ellington's Studio.
G. L. Vinson Company.

But the prizes were only the sugar coating. The feature that really counted most of all was the personal services and sacrifices of those who stood the burden of the work. Prominent among the workers were the various physicians throughout the State who made the examinations, the members of the Raleigh Nurses' Association who assisted the physicians, the Raleigh club women, who served on the reception committee, the young ladies from the Educational Department of Meredith College, who recorded the physicians' findings and kept the score cards, the Raleigh Boy Scouts, who

were ever on the job as pages to run errands and be generally useful, the band from the Institution for the Blind, which rendered music at the presentation of the prizes, and a great many others whose deeds of kindness cannot here be enumerated.

Many of those who rendered the most assistance with the contest have remarked to the writer that they felt will repaid when they saw the good that was being accomplished and saw how gladly many of the mothers received simple suggestions and advice in regard to bringing up "Better Babies."

THE PHILOSOPHY OF COLD FEET

REV. GEORGE W. LAY, Rector of St. Mary's School, Raleigh, N. C.

"He got cold feet" is a colloquial phrase involving several logical steps of cause and effect. These few words suggest the ideas that a person whose feet get cold has his vitality lowered, and that this has an effect on his nerves, and that when his nerves are affected his courage oozes out.

There is no more important point in personal hygiene than keeping the feet warm. There are several ways in which we ward off attacks of disease, but the most important of all is the very simple method of keeping the whole body in a very high state of health. We are continually surrounded by the germs of disease, and, in fact, our bodies frequently contain them. We do not succumb to these diseases, because the body has sufficient resisting power to overcome their attack. The stronger the body, the more temperate and healthy the mode of life, the more sanitary our surroundings, the less likely are we to give in to attacks of disease. One-quarter of all of us have pneumonia

germs in our mouths all the time. We do not have pneumonia because we are able to resist the attack of these germs, but if we become thoroughly chilled in any way we have pneumonia, not because we obtain the germs at that time, but because the germs we already had in our system are able to get in their deadly work. The same thing holds true of such germ diseases as our common colds, and some of the forms of indigestion. Plenty of exercise in the open air, abundance of fresh air at night, cold baths in moderation, and the right amount of simple and nourishing food, are all of them means to keep our bodies in their best state of strength to ward off the attacks of disease.

If we are not sufficiently clothed, our circulation may be strong enough to keep us apparently warm and make us feel comfortable, but the system has had an extra strain put upon it, and our vitality is thereby lowered. If all the windows and doors of a

house are left wide open, where the house is heated by steam, the radiators may still be hot, and the circulation of steam continuous, but if we go down to the boilerroom we will find a fireman using extra exertion to keep the fire in the boiler up to the proper state of efficiency. The system of steam heating is apparently in its normal condition, the difficulty we find to lie in the overtaking of the furnace and boiler, and especially the overworking of the fireman. Any waste of heat places an extra burden on the heating system. It is for this reason that boilers and steam pipes are surrounded by an asbestos covering which corresponds exactly to the clothing we put around our bodies. If we clothe ourselves properly our boilers, so to speak, will have less work to do and we can lay up an extra supply of vital energy, while a different course taxes our system to the utmost point of strain.

The feet are in the most unfavorable position to retain heat. They are on the floor or ground where the temperature is the coldest. They are also in contact as a rule with cold substances which quickly withdraw the heat from the body. We frequently see shoes and other garments on people, especially on the ladies, which as far as protection from cold is concerned are the mere symbols of clothing. A thin white slipper with a sole one-sixteenth of an inch in thickness is a mere symbol of a shoe. Other garments frequently worn are no better. The savage tattoos his body to look like clothes, but he is not protected thereby from the cold. These symbolic garments may look like clothing, but as far as protecting from cold is concerned they are entirely useless, and simply deceive us into misplaced confidence.

If I put my hand on something

wooden I do not feel cold. If I put the same hand on a metal object in the same room, it seems distinctly cold. The temperature of the wood and the metal is exactly the same, but the metal is a better conductor of heat and takes away heat faster from my body, thereby giving the hand the sensation of cold. In like manner if I place my finger on a dry piece of cloth it does not feel cold, but if the cloth be wet it feels very cold, because the wet cloth, being a good conductor of heat, abstracts the heat from my body very rapidly.

It is for this reason that wet shoes are generally recognized as being a cause of illness. The same leather which would be a poor conductor when dry, becomes a good conductor when wet, and rapidly takes away the heat from the feet, and in turn reduces the temperature and vitality of the whole body. There is no particular danger in getting the feet wet, and in fact all of the clothes wet, if one keeps in motion and immediately thereafter changes one's clothes entirely. But a person whose shoes are wet in the morning, as in going to school, and who sits for several hours in a room where the feet are in the coldest air and next to a cold floor, thereby takes the best means possible to abstract heat from the body and add to the task to be performed by the internal boiler, and thus so weakens the system as to make it likely to give in at its weakest point.

The general idea is that this is bound to give one a cold. As a matter of fact, getting the feet wet or chilling oneself suddenly is quite as likely to give a bad headache or some indigestion as it is to give a cold. It merely makes us more likely to get ill in the way to which we are at the time most liable. Rubber overshoes keep the ordinary shoes dry, and when the

former are removed the feet are protected by dry shoes which are non-conductors of heat, and therefore protect the body.

Even though the soles of the shoes are not completely wet so as to make the best conductors of heat, the presence of a layer of wet leather next to the ground constitutes a refrigerating apparatus which rapidly absorbs heat. Salt on the ice in an ice-cream freezer causes the ice to melt and thereby abstracts the heat from the ice-cream holder and causes the ice cream in turn to freeze. The army canteen is a metal holder for water surrounded by a cotton or woolen cloth. By dipping the whole canteen in water this cloth is made wet, and then when hung in the air the water evaporates, and in doing so becomes a refrigerating apparatus causing the water within the canteen to become cool and fit to drink. A similar arrangement is very common in the west, and possibly other parts of the country, especially among those who use automobiles. It is a bag about twelve by eighteen inches, usually made of strong, thick canvas. This bag is thoroughly soaked in water, and when it is filled with about two gallons of water, sufficient water leaks through to evaporate and keep the water within at a temperature suitable for drinking purposes. This same result is obtained in various parts of the world by the use of a porous, earthenware jar, which will allow sufficient moisture to escape through the pores to evaporate and cool the water within.

We are more familiar with this cooling effect in the case of alcohol, or cologne, which is largely alcohol. We know that if we put cologne on

our foreheads when we have a headache, it has the effect of cooling the forehead and giving relief. This is because the cologne evaporates more rapidly than water does. Also the provision of nature by which we perspire in hot weather is for the same purpose, namely, that the slight moisture on the skin, by continual evaporation, shall cool the skin and thereby reduce the temperature of the body.

When even a part of the soles of our shoes is wet we have a refrigerating apparatus which rapidly reduces the temperature of the whole body. It is not necessary that the feet or stockings themselves be wet, because the same results to a certain degree will be accomplished even though the whole sole of the shoe may not be wet. There is nothing in water that gives a cold or reduces temperature. If we kept our feet in water that was of the temperature of the body it would not abstract any cold from us and we would not suffer thereby. But the temperature of the damp earth or of the rain is lower than that of our bodies, and, as shown above, the wet shoe by evaporation reduces the temperature even lower.

Everyone should wear in damp and cold weather sensible shoes with fairly thick soles; the thicker the sole, the thicker the layer of dry, nonconducting leather. Care in the protection of our lower extremities may seem too simple a thing to think much about, but it will prevent a very large proportion of the ordinary headaches, indigestions, and colds that we have, and will also make us far less liable to attacks from other diseases, including tuberculosis, to which our systems are likely to succumb.

OUR WHOLE TIME COUNTY HEALTH OFFICERS

What Outsiders Think of Them

P. W. COVINGTON, M.D.

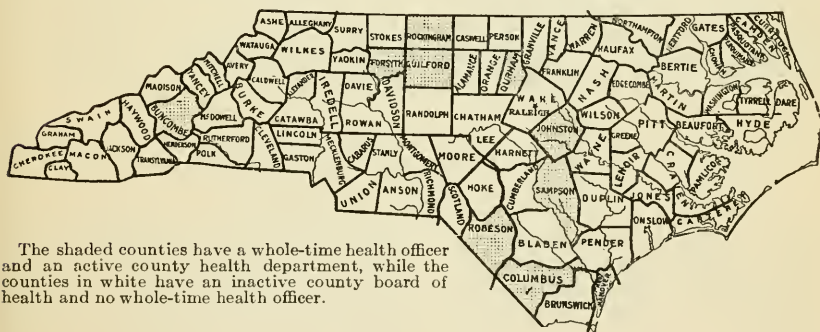
With Rowan and Nash, whose commissioners at a recent meeting made an appropriation for the employment of a whole time county health officer, we have now twelve counties in the State which belong to the whole time county health officer group. The other ten are Columbus, Sampson, Johnston, Robeson, New Hanover, Durham, Guilford, Forsyth, Rockingham, and Buncombe. It is expected from time to time that others of our pro-

MENT: *A member of President Wilson's Cabinet writes:*

DEPARTMENT OF AGRICULTURE,
WASHINGTON, D. C.

DR. P. W. COVINGTON,
State Board of Health,
Raleigh, N. C.

DEAR DOCTOR:—I was glad to get your letter saying that you are pushing a plan to give each county a full-time health officer. I know of no more important step for any state to take than this. I think it is time that the great mass of people living in the



The shaded counties have a whole-time health officer and an active county health department, while the counties in white have an inactive county board of health and no whole-time health officer.

gressive counties will join this group when more of our county officials realize that public health is purchasable and that, within natural limitations, a community can determine its own death rate, and that the greatest advertisement any community can have is that of a low death rate. This will be brought out all the more forcibly in that now we have the enforcement of the vital statistics law. Soon every community will realize that its greatest asset is the health of its citizens and that it is wise economy to spend money in conserving this.

THE FOLLOWING IS WHAT A FEW OF OUR LEADING MEN THINK OF THE WHOLE TIME HEALTH OFFICER MOVE-

rural districts be induced to provide adequate local arrangements. Certainly nothing is more important than that they should have a thoroughly competent man giving his entire time to the care of the public health. I think such an arrangement will be an investment. It will pay in dollars and cents, and immeasurably in physical comfort and peace of mind. I think every county in the Union should have a full-time, well paid, competent health officer, with adequate authority, financial support and assistance.

Sincerely yours,
D. F. HOUSTON,
Secretary.

William F. Snow, of California, one of the most intelligent commissioners of health, says, among other things, in a recent letter to Dr. Rankin:

"I want to congratulate you on the very valuable and practical bulletin which you have recently issued and which contains an article on the full-time county health officer. You are striking at the very heart of our administrative problem, I think."

Dr. Chas. S. Prest, of the State Charities Aid Association of New York, says in a recent letter:

"The marked copy of the recently amended health laws of North Carolina and the pamphlets giving argument for the employment of the whole time county health officer are at hand, and I thank you for them. I am particularly interested in the whole time county health officer, for New York State is about to inaugurate the employment of district health officers which were intended to be whole-time men * * * I would appreciate it if you would send me

one-half dozen copies each of the pamphlets on the whole time county health officer, as well as an additional copy of your Compilation of Public Health Laws. I wish to transmit the copies of the pamphlets to the members of the State Board of Health Council."

Dr. Dinsmore, of the Alabama State Board of Health, writes:

"Dr. Sanders is busy in the field and has asked me to write a letter for him seeking certain information about the whole time county health officer. North Carolina seems to be leading the other states in this matter and I feel that you are in a position to give us valuable information. We are making a special effort just now to secure whole time county health officers in two counties in our State, and the prospects for doing so are very good."

FACTS ABOUT COLDS

Colds are the commonest malady we have. Everybody should know the A B C's about colds. Here they are, put in practical form by an authority on the subject:

"1. Colds are shown to be contagious and, therefore, caused by germs by the simple fact that they are 'catching'; one can take cold from another person who has a cold.

"2. Severe colds always begin with a sensation of chilliness, followed by more or less of a fever—chills and fever. That is the identical manner in which practically every infectious disease caused by microbes begins its career.

"3. Like all germ-caused diseases, colds have a tendency to run a more or less definite course. They are self-limited; that is, after a certain time they usually begin to recover of themselves. In this way a cold behaves ex-

actly as do measles, chicken pox, scarlet fever, pneumonia, etc.

"4. Like other infectious diseases, colds may be followed by inflammations in various internal organs, producing a congestion of the stomach, lungs, liver, spleen, or kidneys. These secondary results are due to the irritating effects of the poisons (toxins) of the germs circulating in the blood stream of the patient. These symptoms of secondary poisoning follow in the wake of colds and influenza, just as they follow attacks of diphtheria and scarlet fever.

"5. Colds are shown to be infectious by the fact that they are usually, sometimes highly, contagious; when we have a severe cold, we can give it to others, to those individuals who are susceptible.

"6. Colds, like other contagious maladies, can be prevented, controlled,

and regulated by isolation and quarantine; and we should hasten the time when they will be thus sensibly regarded and scientifically treated.

"7. Colds are shown to be more or less infectious by the fact that they can generally, in their earlier stages, be successfully treated and effectually aborted by the use of antiseptic nose washes and germicidal throat gargles.

"8. That common colds are of an infectious nature is further suggested

by the well known fact that a severe cold seems to confer a short-lived immunity upon its victim. That is, a healthy, robust person, who is just recovering from a very bad cold, is not likely to have another such attack for several months, maybe not for a full year. Some folks have their regular colds once each winter; then they are seldom bothered for another year."

PROVIDENCE NOT TO BLAME

We often see resolutions of condolence beginning with: "Whereas it has pleased an All Wise Providence to remove from the scene of his earthly suffering, and after a long and painful illness, our beloved friend, John Smith, whose death from typhoid fever occurred on the blank day of blank," etc. Some day in the not far distant future a death from typhoid, the king of filth diseases, will invoke a resolution from the mourning friends of the deceased which will read something like this:

Whereas, through the criminal neglect, carelessness and incompetency of our city officials, our water supply was permitted to be polluted with sewage and other dangerous filth, to the extent of making it unsafe to use; and,

Whereas, as a result of such criminal carelessness, neglect and incompetency of our city, our beloved friend and fellow townsman, John Smith, was killed with typhoid fever; therefore,

Be it Resolved, That we condemn the lack of care and vigilance shown by those whose business it is to safeguard the public health and whose

negligence and disregard of their official duties have caused the death of our friend and brought sorrow to his family; and,

Be it further Resolved, That we earnestly urge upon the public prosecutor that he take immediate steps to bring before the bar of justice the men who in their official capacities are responsible for the death of our friend and for the presence of a dangerous and loathsome disease in our city.

In the light of sanitary science we are becoming less and less inclined to place the blame on Providence for the sickness and suffering that are due to our ignorance or carelessness, or both. God's agencies, if left to work unmolested, make the waters of our lakes and rivers pure. Men defile and pollute them. So, when an epidemic of typhoid breaks out in a community and is traced to a polluted water supply, the resulting sickness and loss of human lives should not be charged against an all wise and merciful Providence, but rather to an ignorant, unenlightened and careless community.—*Chicago Health Department.*

WHEN AND HOW TO BATHE

If you want health, a clear complexion, a system well toned, you should make it an invariable rule to take some kind of a bath not fewer than 365 times a year.

The temperature of the bath? That depends. If you are of a vigorous constitution—or wish to be—I would advise a cold water bath, provided you have enough vitality for the necessary reaction; if not, begin with lukewarm water, and have it less warm each day, as the body gradually becomes accustomed to the change. The water should be of a temperature to suit the body rather than the mind.

A certain Chicago doctor claims that bathing of any kind, especially with soap, is detrimental. He further claims that consumption may be cured and also prevented by non-bathing. There are thousands of people (lazy people) who will rise up and call that doctor blessed. His legitimate sphere is among the "Weary Willies."

Bathing, daily bathing, is necessary to obtain the very best bodily conditions. Health requires that the four eliminating agents of the body (lungs, kidneys, bowels, skin) should be kept normally active. Deep breathing is essential to the first; water, inside and outside, for the three remaining agents.

A cold bath is always stimulating, and has no detrimental reaction for one who is sufficiently robust to take it. If you are obliged to exercise after bathing for the purpose of getting warm, it is a sure indication that your vitality is too low for such a bath. This applies with equal force to the matter of dressing immediately after bathing.

When the cold water comes in contact with the skin, the superficial blood vessels contract, the blood is

driven to the internal organs, and the temperature there is raised, while the temperature at the surface is temporarily lowered. Then when the reaction takes place (a healthful reaction), the skin vessels dilate, the blood rushes back to them, and the bather experiences a pleasant glow over the entire body. A cold water bath in a cold room is a positive luxury—for one whose vitality is high.

A hot water bath, as a rule, should be avoided, especially by those that are nervous. While it is a powerful stimulant of the nervous and vascular system, it is usually followed with strong reaction. The fibrous ends of the nerves, extending over the surface of the body, are thrown into a state of excitement, and so-called nervous leakage follows. Should you insist upon taking a hot water bath, it should be taken immediately before retiring. If taken during the day, do not fail to follow it with a plunge or, at least, a dash of cold water. Be neither overwarm nor chilled when passing from the bath to the outer air. A hot water bath being a reducer, it may be desired by the very obese, but the thin, spare person should avoid it.

A warm water or tepid bath is highly recommended for those that can not take a cold bath. The effect is soothing, the blood flowing into the relaxed superficial vessels of the skin, and thereby increasing its functions. As heat facilitates the bodily functions, a warm bath will often do more to freshen a fatigued person than a longer time spent in sleep. If the bath be only moderately warm (tepid) it acts as a sedative to the nervous system. Those who take the cold bath daily should take a warm bath, with soap, at least once a week, for the sake of cleanliness.—*Idaho State Board of Health.*

THE PRESS ON THE OXYPATHOR

In commenting on the exposure of the Oxypathor fraud, the *State Journal* gives voice to the following:

"If the State Board of Health is correct, then it is unquestionably the duty of the press to lend its aid by giving as wide publicity as possible to the exposure. The fact that the Oxypathor pays certain papers large sums for advertising should not alter the case. Until the *State Journal* is ready to attack the State Board of Health as a useless department of government, or call for the retirement of those now composing that Board as unworthy public servants, it stands ready to coöperate with it in protecting the health and lives of the people. This course may lose us much money, which we might otherwise get from advertising of a questionable character, but we say frankly that if this paper can not be published without being a party to defrauding the people and endangering their health and lives, it will cease publication."

Lack of space forbids our quoting freely from state papers in regard to this matter, but to show what we believe to be the general attitude of the press in regard to exposing such frauds, we quote the following from *Charity and Children*:

"We are especially fortunate in North Carolina in having a State

Board of Health that stands between the people and the fakes and frauds that abound in the practice of medicine and the selling of 'remedies' by quacks and rascals. The people are helpless in defending themselves from impostors who advertise freely and make glowing promises, but our State Board of Health scans the whole field with eagle eyes, and suffers no fraud to escape. They have recently picked up one or two of these clever promoters who proposed to trade on the necessity and distress of those who do not know, and we are constantly receiving wholesome advice from the gentlemen as to what is spurious and what is genuine in the field of medicine. There is much for this Board to do, and they are faithfully performing their duty, but in our judgment nothing in all the broad domains of their activity surpasses in importance this matter of protecting the public from frauds and deceivers."

While we appreciate the nice things said about the work of this Board, and feel that perhaps we are given more credit in this direction than we deserve, yet it should be borne in mind that frauds and fakes are hard to reach at best, and that no laws whatsoever exist to back up the efforts of this Board in such matters.

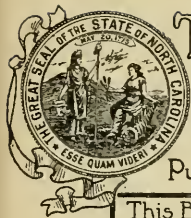
TOBACCO AND ALCOHOL

The question is frequently asked, "Have you any statistics on the effect of tobacco and alcohol on the length of life?" No, we have none here in North Carolina. In fact, we just began gathering our first general birth and death certificates on the 15th of last November, and it will be several years before they begin to show very much. However, we have just run

across some interesting facts and figures compiled by life insurance companies along these lines. Certain life insurance companies, particularly in Great Britain, have found the mortality rate so much lower among abstainers that they are quoted a lower life insurance rate than others. The most striking figures, however, are furnished by a New England company,



Looking Towards Fayetteville.



ALMANAC NUMBER

The Health Bulletin

Published by THE NORTH CAROLINA STATE BOARD OF HEALTH

This Bulletin will be sent free to any citizen of the State upon request.

*Published monthly at the office of the Secretary of the Board, Raleigh, N. C.
Entered as second-class matter at Postoffice at Raleigh, N. C., under Act of July 16, 1894.*

Vol. XXVIII.

JANUARY, 1914.

No. 10

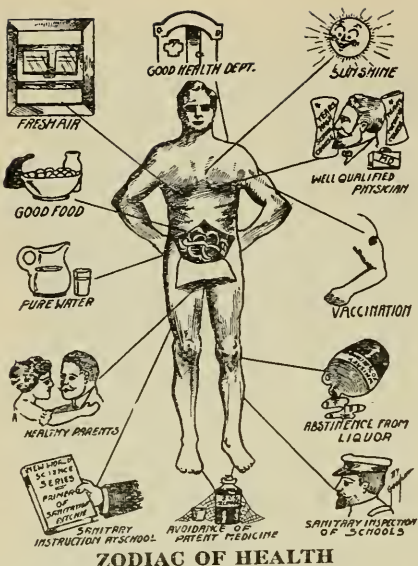
THE WOMEN'S WARD

State Sanatorium for the Treatment of Tuberculosis



"Here's to the land of the longleaf pine,
The summer land where the sun doth shine ;
Where the weak grow strong and the strong grow great ;
Here's to down home, the old North State."

MISS SALLIE STATION,
TARBORO, N. C.



ZODIAC OF HEALTH

The many good points about the zodiac of health require that we republish it. No almanac is quite complete without a zodiac, hence our health zodiac.

A DIRTY CUSS

"Who for the public has no better use Than to smear clean walks with tobacco juice, Expecting others to clean his muss, Can be justly termed a 'dirty cuss.'" * * *

"The nation with the keenest sense of justice and the highest standard of intelligence and morals is the one which should place the highest value upon human life and surround it with the greatest protection." * * *

Roll on thou stiff and dark old towel, roll—

A hundred hands are wiped on thee each day;

Thou leavest mystic records, like a scroll,

And finger prints of all who pass thy way;

And where be those who saidst thou should not stay?

They pass, but thou rollest thy length immense.

FREE PUBLIC HEALTH LITERATURE

The State Board of Health has a limited quantity of health literature on the subjects listed below, which will be sent out, free of charge, to any citizen of the State as long as the supply lasts. If you care for any of this literature, or want some sent to a friend, just write to the State Board of Health, at Raleigh. A post card will bring it by return mail.

No. 9. Medical Inspection of Schools and School Children.

No. 10. Care and Feeding of Babies.

No. 11. The Plague of Flies and Mosquitoes.

No. 12. Residential Sewage Disposal Plants.

No. 13. Sanitary Privy.

No. 14. Hookworm Disease.

No. 15. Malaria.

No. 18. Tuberculosis Leaflet.

No. 19. Compilation of Public Health Laws of North Carolina.

No. 20. Tuberculosis Bulletin.

No. 21. Fly Leaflet.

No. 22. Baby Leaflet.

No. 23. The Vital Statistics Law.

No. 25. Typhoid Fever Leaflet.

No. 27. The Whole Time County Health Officer.

No. 28. Typhoid Fever.

No. 29. Rules and Regulations for County Boards of Health.

No. 30. Measles.

No. 31. Whooping Cough.

No. 32. Diphtheria.

No. 33. Scarlet Fever.

No. 34. Smallpox.

No. 35. Some Light on Typhoid.

No. 36. County Health Work on an Efficient Basis.

Anti-Spitting Placards (11 inches by 9 inches).

Anti-Fly Placards (11 inches by 19 inches).

THE Health Bulletin

PUBLISHED BY THE NORTH CAROLINA STATE BOARD OF HEALTH

V. XXVIII.

JANUARY, 1914.

No. 10.

VITAL STATISTICS REMINDERS.

Physicians, midwives and parents are required to report each birth within ten days to the local registrar in whose town or township the birth occurs. If you don't know who is the local registrar in your town or township, ask your mayor, the chairman of your Board of County Commissioners, or write the State Board of Health.

Failure to report births may deprive the individual of personal, social or property rights, and is a violation of law.

Undertakers, or persons acting as such, are required to furnish a complete death certificate to the local registrar in the town or township in which the death occurs.

Failure to secure a certificate of death which gives the cause of death and family history may deprive a widow or orphan of a pension or insurance fund, prevent the State Board of Health from locating an epidemic which it can stop, cause the spread of disease, and is a violation of law.

Local registrars should inform the State Registrar of violations of the law, giving names and addresses and the facts.

If an epidemic occurs in a community, local registrars should inform the State Registrar, that the State Board of Health may take steps at once to stop the spread of the disease.

GOVERNOR TO COMPLIMENT MOTHERS.

Will Write Personal Letter to Every Mother Who Has Her Baby Registered.

Governor Craig is greatly interested in North Carolina babies and in extending the full privileges of the new vital statistics law to every baby born in the State. To this end he has just announced that, in special recognition of every baby whose birth is recorded under this new law, he will write the mother a letter and not only compliment her on her motherhood, but express his personal appreciation of her having availed herself of the privilege of the new law. Babies whose parents do not think enough of them to have their births recorded will of course not hear from the Governor.

Along with the Governor's letter the State Board of Health has asked to be allowed to send some of its best literature on the care and feeding of infants, in this way endeavoring to reduce our tremendous infant mortality.

The Governor fully appreciates the great privilege the State affords its citizens in making complete official records of their births and deaths. There is a provision in the new law whereby births and deaths that occurred before the law became effective last fall may be registered, and it is interesting to note that our own Governor was the first citizen of the State to avail himself of this privilege and to file his birth certificate.

STOMACH TROUBLE.

How often we hear this term "stomach trouble." Did you ever have it? If you have, you know what a humbler it is, how effectually it humbles one's pride, how thoroughly it dissipates one's egotism. Yet stomach trouble is not a wholesome discipline, for the longer it continues the grouchier and more impossible we become. The stomach these days is a sort of garbage can. It is suspended by straps immediately south of the thoracic cavity, and being connected with that funnel called the mouth by a good strong tube, it readily catches chunks of dead animals, lumps of poorly baked bread, boluses of vegetables, ices, pickles, soggy pies, weinerwurst, booze, and muddy coffee. The tobacco eaters add that portion of tobacco juice which they don't use for flooding sidewalks.

There is no more patient and long-suffering organ in the human body than the stomach. It is amazing how long it will stand abuse, but once it kicks back, then look out, for something is coming to you sure. You may hit it with an un-killed railroad sandwich, scorch and burn it with pepper and mustard, irritate it with salt and vinegar, chill it with ice cream, ice water and mint juleps, pour stinking mineral water into it, shrink it with rotgut whiskey, assault it in any old way, and it will work uncomplainingly for a long time; until—alas! and alack! some day it will go on a strike, and then the doctor for you, or you run to the drug store and proceed to souse the poor thing with patent medicines. Of course they do harm, although temporary relief may be secured. So the world becomes dark and life is a failure

to you, but you quit bolting and gorging, that's sure; for that much sense will come finally to any kind of a fool. Oh, that we could have the good sense to know, when young, that the stomach should not be used for a garbage can. Then we would not load our tables with foods, some good, some bad, and then chase them half chewed down our gullets with black coffee or ice water.

"Full many a man has lost his head
Through eating soggy, half-cooked
bread,

And he who would his kidneys save
Had best avoid the whisky wave.
Your heart and nervous system, too,
Are surely worth a heap to you.
Why prod them, then, with nicotine,
And make believe all is serene?
In tobacco heart there is no wealth,
And what is more, there's weakened
health.

Oh! foolish man, when thus you
choose

Your soul and body to abuse;
You'll realize, some pleasant morn,
That you have raised an awful
storm."

—*Indiana Bulletin.*

GIVE YOUR BABY A GOOD START IN LIFE.

"The latest reports of the Bureau of Census on mortality statistics show that slightly more than 42 per cent of the infants dying under one year of age in the registration area in 1911 did not live to complete the first month of life, and that of this 42 per cent, almost seven-tenths died as a result of conditions existing before they were born or of injury and accident at birth."

In many instances the expectant mother does not consult her physician until the child is about to be born, if, indeed, she consults him at all, presuming the condition to be a perfectly normal one that needs no assistance. This mistake is made frequently. In order that the mother can intelligently prepare and





1st Month.

JANUARY, 1914.

31 Days.

Day of Month	Day of Week	Important Days, Dates and Healthgrams	Sun		Moon
			Rises	Sets	Rises or Sets
1 Th		New Year's Day. Start the year right.	7 11	4 58	10 00
2 Fr		Take a bath every day this year.	7 10	5 0	11 2
3 Sa		Ventilate—don't hibernate. Fresh air is cheap.	7 10	5 1	11 57
4 Su		Gov. David L. Swain of North Carolina born, 1808.	7 10	5 1	morn
5 Mo		An open window is better than an open grave.	7 10	5 2	0 57
6 Tu		Epiphany. Too much fresh air is just enough.	7 10	5 3	1 59
7 We		When grown people have "chicken pox," keep away from them.	7 10	5 4	3 0
8 Th		Battle of New Orleans, 1815.	7 10	5 5	4 4
9 Fr		The neglected cold is the season's greatest danger.	7 10	5 6	5 7
10 Sa		The best disinfectants—sunshine, soap and hot water.	7 10	5 6	6 8
11 Su		Sir Hans Sloane, father of British Museum, died, 1753.	7 9	5 7	rises
12 Mo		Warm rooms have killed more people than ever froze to death.	7 9	5 8	5 32
13 Tu		Sunshine is God's best germ destroyer.	7 9	5 9	6 44
14 We		To avoid colds, keep your feet dry and warm, and ventilate your house.	7 9	5 10	7 58
15 Th		Fall of Fort Fisher, 1865. [kerchief.	7 9	5 11	9 13
16 Fr		Cough and sneeze on the Q. T. Get behind a hand-	7 9	5 12	10 24
17 Sa		Benj. Franklin born, 1706. Victory at Cowpens, 1781.	7 8	5 13	11 36
18 Su		Don't cork up your house like a bottle.	7 8	5 14	morn
19 Mo		Robert E. Lee's birthday. Paul Revere's ride, 1775.	7 8	5 15	0 51
20 Tu		Avoid patent medicines as you would a pestilence.	7 8	5 15	2 5
21 We		"Stonewall" Jackson born, 1824.	7 7	5 16	3 18
22 Th		Wilmington captured by the Federal Army, 1865.	7 7	5 17	4 28
23 Fr		William Gaston died, 1844.	7 6	5 18	5 30
24 Sa		Edward Hyde appointed first Governor of North Carolina, 1712.	7 6	5 19	6 24
25 Su		Air your house thoroughly every day.	7 5	5 20	7 9
26 Mo		Jenner, discoverer of vaccination, died, 1823.	7 4	5 21	sets
27 Tu		Many a cough ends in a coffin.	7 3	5 22	6 44
28 We		Cuban independence, 1909. Don't spit.	7 3	5 23	7 48
29 Th		Every careless consumptive infects at least four others.	7 2	5 24	8 49
30 Fr		A "stiff drink" makes the stomach warm but the skin cold.	7 2	5 25	9 44
31 Sa		Thinly clad feet make for heavy colds.	7 2	5 26	10 45

MOON'S PHASES.

	D	H	M		D	H	M
 First Quarter,	4	7	55 morning	 Last Quarter,	18	7	16 evening
 Full Moon,	11	11	55 evening	 New Moon,	26	1	20 morning

THINGS TO DO ON THE FARM IN JANUARY.

1. Take an inventory; see what you are worth; find out what you have on hand that you do not need and arrange to dispose of it; find out what you need in the way of equipment for economical farming and arrange to get it if possible.
2. Look after the live stock and poultry to see that they are comfortable and doing well; be sure especially that there are no lice on either.
3. Clear out the stumps, bushes and briars; get rid of needless ditches and terrace banks.
4. Start the garden; give it a coat of manure and plant the early hardy crops.
5. Take care of the manure; get it out on the fields as early as possible.
6. Get a good book on fertilizers and soil fertility and study this matter just as a boy studies a lesson in school; it will be as profitable work as you ever did.

care for her baby, she should select and consult her physician early in pregnancy. Those who are unable to employ a physician should place themselves under the care of the local maternity societies.

A poorly fed or abnormal mother can not give birth to a vigorous, healthy infant and nurse it; hence, the quantity and kind of food, the methods by which constipation is to be avoided, the importance of bathing, the forms of exercise and work which should be indulged in, the style of clothing which should be worn, pelvic deformities, and the prevention of kidney complications are vital topics which should be discussed with the family physician.

A lower death rate among babies can only be accomplished through intelligent motherhood, maternal nursing, cleanliness and fresh air, and pure and properly prepared milk for the babies who have to be artificially fed.

ADD THESE TO YOUR RESOLUTIONS FOR THIS YEAR.

I will ventilate.

I will not wilfully spread contagion among my fellow-men.

I will endeavor to make my neighbors' front yards envious of my back yard.

I will not drive hob nails into my liver by the excessive use of alcohol.

I will endeavor to get more of God's good sunshine and pure air.

I will not patronize the dirty milkmen, fly-infested markets and restaurants, unprotected fruit and candy stands, the "hokey-pokey man" or other health-menacing agencies.

I will hold health in higher es-

teem and will try so to live that I, my family, my neighbors, my friends, may be healthier, happier and more content.

I will interest myself in securing larger appropriations for public health work in order that the health and life of every member of my family may be more efficiently safeguarded.—*Chicago Bulletin*.

DR. OSLER'S CHALLENGE TO THE UNVACCINATED.

Dr. Osler, one of the greatest living medical authorities, takes occasion to lay down the strongest challenge to the unvaccinated—we have seen for some time. Those timid ones who are afraid of a sore arm or those ignoramuses who do not know the protecting power of vaccination will do well to read Dr. Osler's challenge.

A great deal of literature has been distributed casting discredit upon the value of vaccination in the prevention of smallpox. I do not see how any one who has gone through epidemics as I have, or who is familiar with the history of the subject, and who has any capacity left for clear judgment, can doubt its value. Some months ago I was twitted by the editor of the *Journal of the Anti-vaccination League* for "a curious silence" on this subject. I would like to issue a Mount Carmel-like challenge to any ten unvaccinated priests of Baal. I will go into the next severe epidemic with ten selected, vaccinated persons and ten selected unvaccinated persons—I should prefer to choose the latter—three members of Parliament, three anti-vaccination doctors, if they could be found, and four anti-vaccination propagandists. And I will make this promise—neither to jeer nor jibe when they catch the disease, but to look after them as brothers, and for the four or five who are certain to die, I will try to arrange the funerals with all the pomp and ceremony of an anti-vaccination demonstration.—*American Magazine*.





2d Month.

FEBRUARY, 1914.

28 Days.

Day of Month	Day of Week	Important Days, Dates and Healthgrams	Sun		Moon
			Rises	Sets	Rises or Sets
1 Su		Americans defeated by the British at Cowan's Ford, 1781.	7 1	5 27	11 45
2 Mo		Ground Hog Day. Don't be a ground hog. Come out every day.	7 0	5 28	morn
3 Tu		Wiley, North Carolina's first superintendent of public instruction, born, 1819.	7 0	5 28	0 46
4 We		The man who dreads vaccination never saw smallpox.	6 59	5 29	1 48
5 Th		Whiskey is the chief ally of pneumonia.	6 58	5 30	2 50
6 Fr		France concluded treaty with the United States, 1778.	6 58	5 31	3 52
7 Sa		Stamp Act passed by the British Parliament, 1765.	6 57	5 32	4 50
8 Su		To avoid pneumonia—keep your windows open.	6 56	5 33	5 42
9 Mo		A stitch in the underwear may save a stitch in the side.	6 55	5 34	6 28
10 Tu		Pneumonia is spread by intemperance, exposure and	6 54	5 35	rises
11 We		Wake Forest College founded, 1834. [carelessness.	6 53	5 36	6 53
12 Th		Abraham Lincoln born, 1809. First student entered University of North Carolina, 1795.	6 53	5 37	8 10
13 Fr		Keep on being a fresh air fiend even if it is cold.	6 52	5 38	9 22
14 Sa		St. Valentine's Day. Don't spit.	6 51	5 39	10 39
15 Su		Destruction of battleship Maine at Havana, 1898.	6 50	5 40	11 54
16 Mo		Safeguards against pneumonia—a temperate life, fresh air, ample clothing, abundant food.	6 49	5 41	morn
17 Tu		Most colds are catching.	6 48	5 42	1 9
18 We		Richard H. Lewis, Secretary North Carolina State Board of Health, born, 1850.	6 47	5 43	2 21
19 Th		James Davis, first printer in North Carolina, appointed public printer to the province, 1754.	6 46	5 44	3 24
20 Fr		Sleep with your windows open—make health while the moon shines.	6 44	5 45	4 20
21 Sa		Armed resistance to the landing of British stamps at Brunswick, 1766.	6 43	5 46	5 7
22 Su		George Washington born, 1732. Get vaccinated.	6 42	5 47	5 43
23 Mo		Thomas Fanning Wood, first Secretary North Carolina State Board of Health, born, 1841.	6 41	5 47	6 15
24 Tu		Keep the indoor air pure and healthful.	6 40	5 48	sets
25 We		Ash Wednesday. A large pock on the arm beats small pocks on the face.	6 39	5 48	6 38
26 Th		The best weapon against pneumonia—high body	6 38	5 49	7 35
27 Fr		Battle of Moore's Creek Bridge, 1776. [resistance.	6 38	5 50	8 35
28 Sa		North Carolina voted against calling a convention to carry the State out of the Union, 1861.	6 37	5 51	9 35

MOON'S PHASES.

MOON'S PHASES.									
	D	H	M		D	H	M		
 First Quarter,	3	5	19	morning	 Last Quarter,	17	4	9	morning
 Full Moon,	10	0	21	evening	 New Moon,	24	6	48	evening

THINGS TO DO ON THE FARM IN FEBRUARY.

1. Buy your seeds, both farm and garden.
2. Get to work in the garden; manure and fertilize it; plant hardy crops, peas, radishes, onions, lettuce, potatoes, etc., outdoors; sow tomatoes, pepper, eggplant seed in hotbeds or boxes.
3. Prune the fruit trees; clean all trash out of the orchard; spray with lime-sulphur.
4. Look after the poultry houses; set the incubator or some hens; order needed stock and eggs.
5. Fix up about the house; plant shrubs; topdress the lawn; fix up the yard and garden fences.

GET WHAT'S COMING TO YOU.

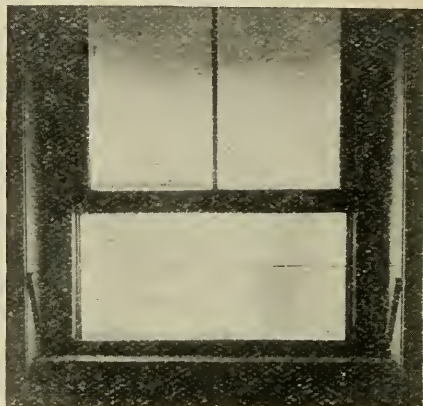
There's twenty-four hours' worth of fresh air due you every day, and if you don't get it, the changes are that you are to blame. Of course, there are the close, stuffy, vile-smelling "movies," and the churches but little better. You are not altogether responsible for the poison you breathe there. There may be some excuse for the "movies." They have to be closed and darkened, but church ventilation—well, someone said, "the devil only knows" about that. Even when a minister pours out his very life itself before a drowsy congregation, is it any wonder that he doesn't get results?

But it is not always up to the "movies" or the churches, not by any means. There is your own house, the very room in which you are now sitting. If you have a single window open six inches, don't read another word of this article. It doesn't concern you. But if you haven't any windows open, the chances are ten to one that you are afraid of that "cold draft." No, of course you are not a draft crank. We didn't say you were. But, by the way, did you ever notice how that genus, of the set-you-know, just not "our kind"—the "draft crank," has his inning from about the middle of October to the middle of April? Then that hoary ignoramus gives way to that delightful nymph we court on the verandas, in the shade, or out in the summer sleeping porch, whose maiden name is Delightful Breeze, fairest daughter of Fresh Air.

But we must get back to the house, and, in most cases, the stove heated house in winter. There is where we heat the same old air over and over again, and breathe it over and

over again, until the wonder is that the stuff doesn't wear threadbare.

What are we going to do about it? Easy enough. In the first place, we'll raise the window. That's settled. No, we will not get a "cold draft," either. That is a vulgar phrase, never used except by the unlettered. What will we do?



WINDOW VENTILATOR.

A slanting piece of glass (or a board) placed in a window frame diverts incoming fresh air upward into the room without causing objectionable "drafts."

We'll set a piece of glass, about a foot high and as long as the window is wide, in a slanting position across this opening, as shown in the picture. Then those life-giving incoming zephyrs will be slanted upward and diffused with some of those vile emanations from excreting lungs, to say nothing of decaying teeth, offensive mouths, neglected laundry or forgotten bath.

In the accompanying cut you see such a glass placed on two slanting cleats, with the lower part of the sash above the top edge of the glass, and *no draft*. That is the best and cheapest window ventilator we have found. When placed as shown, it is as easily removed as a book from the table. Try it. If you think

Day of Month	Day of Week	Important Days, Dates and Healthgrams	Sun		Moon
			Rises	Sets	Rises or Sets
1 Su		Ratification of the Articles of Confederation completed, 1781.	6 34	5 54	10 35
2 Mo		Clean up and keep clean—and don't spit.	6 32	5 56	11 36
3 Tu		Consumption can be cured, if taken in time.	6 30	5 57	morn
4 We		The undertaker comes seldom to the house with open	6 28	5 58	0 39
5 Th		Boston Massacre, 1770. Don't spit. [windows.	6 26	5 59	1 38
6 Fr		The tubercular dairy cow is a menace to public health. [consumption.	6 24	6 0	2 35
7 Sa		Fresh air, rest and good food are the only cures for	6 23	6 1	3 31
8 Su		Bath, first town in North Carolina, incorporated, 1705.	6 22	6 1	4 18
9 Mo		Sleeping in the open air is insurance against con-	6 20	6 2	4 58
10 Tu		Davidson College incorporated, 1837. [sumption.	6 18	6 3	5 33
11 We		The best thing about a window—raising it.	6 17	6 4	rises
12 Th		To give other people consumption—spit on their floors.	6 16	6 5	6 56
13 Fr		Fresh air in the lungs is as helpful as money in the	6 14	6 6	8 14
14 Sa		The only bad night air is last night's air. [bank.	6 13	6 6	9 36
15 Su		Defeat of Greene by Cornwallis at Guilford Court House, 1781.	6 12	6 7	10 53
16 Mo		Fresh air is cheaper than drugs and better than doc-	6 11	6 8	morn
17 Tu		St. Patrick's Day. No spit, no consumption. [tors.	6 9	6 9	0 8
18 We		Keep the windows open and the pill box shut.	6 8	6 10	1 17
19 Th		It is better to sleep in a cold room than in a cold grave.	6 6	6 11	2 17
20 Fr		Fake consumption cures guarantee only one thing—	6 4	6 12	3 6
21 Sa		Beginning of spring. [death.	6 3	6 12	3 46
22 Su		It is easier to ventilate a room than to dig a grave.	6 2	6 13	4 18
23 Mo		A fool and his health are soon parted.	6 0	6 14	4 43
24 Tu		First charter of Carolina issued by King Charles II,	5 59	6 15	5 5
25 We		Patent medicines never cure consumption. [1663.	5 58	6 16	5 22
26 Th		Feed yourself plenty of oxygen.	5 57	6 17	sets
27 Fr		Fresh air is the prime factor in acquiring physical perfection.	5 55	6 18	7 27
28 Sa		When you don't know what to eat, eat nothing.	5 53	6 19	8 29
29 Su		Don't spit on the floor or sidewalk.	5 51	6 20	9 29
30 Mo		The little brown jug is a poor doctor.	5 50	6 20	10 30
31 Tu		The best nerve restorer—"keeping sweet."	5 48	6 21	11 30

MOON'S PHASES.

D H M

D H M

☾ First Quarter, 4 11 49 evening

☾ Last Quarter, 18 2 25 evening

☾ Full Moon, 11 11 4 evening

☾ New Moon, 26 0 55 evening

THINGS TO DO ON THE FARM IN MARCH.

1. Get the land ready for the crops. Plow well; harrow and re-harrow until a perfect seed bed is obtained. Remember that good preparation is half the battle.
2. Use good seeds. It will be cheaper to pay a good price for good seeds than to plant those of poor quality. Then arrange some seed plants and grow your own seeds.
3. Make a start with pure bred poultry. Fix up houses and runways. Rid the premises of lice.
4. Put the spray pump to work in the orchard. Keep up the garden planting and cultivation.
5. Paint the house. Buy a lawn mower and start it running. Whitewash fences and outbuildings.
6. Give the boy an acre to work in corn or cotton, or a calf, or a litter of pigs. Interest the girls in tomato growing or poultry raising.

baby may interfere, replace the piece of glass with a thin board. That's just as good, except that it shuts out some of the light.

Yes, there's the bedroom, too. In a bedroom, as elsewhere, one person is enough, two are company, and three are a crowd. Where there is company, or less in a room, close all the bedroom doors and all but one window. Open that window wide. Roll the bed alongside it, place your pillow over as near the window as you can, or even on the window sill, if possible. Then dress warmly, cover up well, and go to sleep with your head as near the window as possible. Where there is more than company in a bedroom, that is, where necessity requires that there be more than one bed in a room, it is best to open all the bedroom door and windows and let the fresh air circulate at will. In other words, keep your windows just as you do in the summer time, and make up for the difference in temperature by adding warmer clothing. That's all there is to it. In the morning you will feel like a three-year-old, if you have had sense enough to dress warmly. If you haven't dressed warmly enough, you will deserve the brand new cold you will probably have.

Then, if you have dressed warmly enough, and if you care to take out an insurance policy against colds and issue an injunction against grip and consumption, just wring a towel or wash cloth out of cold water, and wash the neck, chest, and abdomen. Don't neglect to rub fast and furious. Follow this with a good, stiff rubdown with the roughest dry towel you can find, and you will be surprised to find how your work looks like play.

THE RIGHT KIND OF MAN.

In the initial issue of the little Health Bulletin being issued by Dr. George M. Cooper, Whole Time County Health officer of Sampson County, we find the following, which goes to show the altruistic spirit shown by men who are taking up health work for the sake of humanity, regardless of personal conveniences, loss of income and the uncertainties of public offices. These are the kind of men that are making the new North Carolina of today. We quote the introduction he gives in his bulletin:

In this, the first appearance of our Bulletin, we want to try to explain something of the task ahead of us. We shall issue a record of our work from time to time in order that the people may know what is being done.





As is generally known, Sampson is one of twelve North Carolina counties which recently decided to spend some of their money in trying to make a better place for their people to live, by endeavoring to prevent some unnecessary diseases, in other words, trying to prevent sickness, among the children especially, rather than spend it all in caring for paupers later.

We realize that, like all reforms, it is a departure from the usual, and as such must fight ignorance and selfishness, and prejudice, and greed, and, worst of all, petty politics. We realize fully that we shall, in all probability, be kicked down and out for our trouble, sooner or later, and we have entered the work with our eyes wide open, so to speak.

But we also realize that while reforms sometimes go backward for a time, it is never for long. For example, we well remember with shame that the people of Clinton once ACTUALLY VOTED DOWN HER GRADED SCHOOL, but not for long; you see the principle could not be voted down. Again, we realize that we must have the cordial co-operation of the people if the work is to have the effect for good we hope and expect it to have. Therefore, we want to request here and now the help of all the people in the county.

Day of Month Day of Week	Important Days, Dates and Healthgrams	Sun		Moon Rises or Sets
		Rises	Sets	
1 We	All Fools' Day.	5 47	6 22	morn
2 Th	A city's most valuable asset is wholesome water.	5 46	6 23	0 28
3 Fr	Second Provincial Congress of North Carolina met at New Bern, 1775.	5 44	6 23	1 22
4 Sa	Nothing is more important to health than good water.	5 42	6 24	2 10
5 Su	The old oaken bucket was fine sentiment, but poor sanitation.	5 41	6 25	2 53
6 Mo	The North Pole reached by Peary, 1909.	5 39	6 26	3 29
7 Tu	Polluted water is not purified by painting the pump.	5 38	6 27	3 57
8 We	Last General Assembly to meet under the authority of British crown dissolved, 1775.	5 36	6 28	4 23
9 Th	Battle of Appomattox, 1865. The last volley was fired by North Carolina troops under Gen. Cox.	5 35	6 29	4 53
10 Fr	Good Friday. A dirty well is more dangerous than a dirty kitchen.	5 34	6 29	rises
11 Sa	A healthy thirst is better than polluted water.	5 33	6 30	8 27
12 Su	Easter Sunday. Provincial Congress at Halifax authorized the North Carolina delegates to the Continental Congress to vote for a declaration of independence, 1776.	5 31	6 31	9 46
13 Mo	Thomas Jefferson born, 1743.	5 30	6 32	11 1
14 Tu	Assassination of Pres. Lincoln, 1865. Steamship Titanic wrecked, 1912.	5 28	6 33	morn
15 We	Money spent on a good pump pays dividends in good health.	5 27	6 34	0 6
16 Th	Every well should have a sound, tight top.	5 25	6 34	1 1
17 Fr	In the people's health lies the nation's strength.	5 24	6 35	1 45
18 Sa	The best spring tonic is pure air and sunshine.	5 23	6 36	2 20
19 Su	Battle of Lexington, 1775. Earthquake at San Francisco, 1906.	5 22	6 37	2 47
20 Mo	Many a "pretty" spring has caused a dismal funeral.	5 21	6 38	3 10
21 Tu	Old Dr. Booze always collects his bills.	5 20	6 39	3 29
22 We	Are you dull and stupid? Take a big dose of fresh air.	5 18	6 40	3 49
23 Th	All the time is clean-up time. Keep a-scrubbin'.	5 17	6 41	4 10
24 Fr	A good iron pump costs less than a case of typhoid.	5 15	6 41	4 30
25 Sa	A city is as clean as its people	5 14	6 42	sets
26 Su	Your backyard reflects your habits of cleanliness.	5 13	6 43	8 22
27 Mo	First expedition sent out by Sir Walter Raleigh sailed from England, 1584.	5 12	6 43	9 23
28 Tu	A good blood medicine—work and a laxative diet.	5 11	6 44	10 22
29 We	A city is known by the streets it sweeps.	5 10	6 45	11 17
30 Th	Washington inaugurated as first president, 1789.	5 9	6 46	morn

MOON'S PHASES.

	D	H	M		D	H	M
 First Quarter,	3	2	27 evening	 Last Quarter,	17	2	38 morning
 Full Moon,	10	8	14 morning	 New Moon,	25	6	8 morning

THINGS TO DO ON THE FARM IN APRIL.

1. Plant cotton and corn—but not until your land is thoroughly prepared, and not until you have secured good seed and seen to it that your planter does perfect work.
2. Plant seed patches of both cotton and corn so as to have good seed of your own next spring.
3. Plant some pasture lots for the hogs, rape early in the month; cowpeas, soy beans and peanuts after the ground becomes thoroughly warm.
4. Screen the house; drain all puddles near it; see that all garbage is removed from about it.

TREATMENT IN EMERGENCIES

While Waiting for the Doctor to Come.

SUFFOCATION FROM INHALING ILLUMINATING GAS OR DAMP GAS IN WELLS OR MINES—Get into the fresh air as soon as possible and lie down. Keep warm. Take ammonia—twenty drops to a tumblerful of water, at frequent intervals; also, two to four drops tincture of nuxvomica every hour or two for five or six hours.

FOR CONVULSIONS—Give nauseating doses of ipecac. Rub spirits of turpentine on the stomach. If from teething, give paregoric and magnesia and a high enema. Bathe the body in warm water; put cold water on the head.

FOR COLIC—One or two heaped teaspoonfuls of common salt in cold water will sometimes relieve; repeat if necessary. A teaspoonful of turpentine and twenty drops of peppermint is also good. Cover up warm in bed and lie still. Wrap body from neck to knees in blanket that has been immersed in boiling water. Put a mustard plaster on the chest.

FOR THE BITE OF A SNAKE—Bind above the wound tight and suck blood from wound. Give whiskey or some liquor or give sweet oil, a wine-glassful at once. Repeat, and bathe the wound in sweet oil.

FOR A FRESH CUT—Draw the sides together and bind with strips of adhesive plaster and a cloth over this kept wet with arnica.

CINDERS IN THE EYE—Roll soft paper up like a lamplighter, and wet the tip to remove, or use a medicine-dropper to draw it out. Rub the other eye.

In Case of Poisoning.

FIRST—Send for a physician.

SECOND—Induce vomiting, by

tickling throat with feather or finger. Drink hot water or strong mustard and water. Swallow sweet oil or whites of eggs. Acids are antidotes for alkalis, and vice versa.

Special Antidotes and Poisons.

ACIDS—Muriatic, Oxalic, Acetic, Sulphuric (Oil of Vitriol), Nitric (Aqua Fortis)—Soapsuds, magnesia, lime-water.

PRUSSIC ACID—Ammonia in water. Dash water in face.

CARBOLIC ACID—Flour and water, mucilaginous drinks.

ALKALIS—Potash, Lye, Harts-horn, Ammonia—Vinegar or lemon juice in water.

ARSENIC—Rat Poison, Paris Green—Milk, raw eggs, sweet oil, lime-water, flour and water.

BUG POISON—Lead, Saltpetre. Corrosive Sublimate, Sugar of Lead. Blue Vitriol—Whites of eggs or milk in large doses.

CHLOROFORM—Chloral, Ether—Dash cold water on head and chest. Artificial respiration.

CARBONATE OF SODA—Copperas, Cobalt—Soapsuds and mucilaginous drinks.

IODINE—Antimony, Tartar Emetic—Starch and water, astringent infusions.

BLUE OR ANTISEPTIC TABLETS—Whites of eggs, milk, mucilaginous drinks.

OPIUM—Morphine, Laudanum. Soothing Powders or Syrups, Paregoric—Strong coffee, hot bath. Keep awake and moving at any cost.

Simple Home Remedies.

FOR CORNS AND BUNIONS—Burn with caustic after bathing, and if necessary repeat. Or, apply the pulp of lemon until the hard part can be easily removed.

Day of Month	Day of Week	Important Days, Dates and Healthgrams	Sun		Moon
			Rises	Sets	Rises or Sets
1 Fr		Dewey destroyed the Spanish fleet at Manila, 1898.	5 8	6 47	0 7
2 Sa		Got your backyard cleaned up? Looks better, doesn't it?	5 7	6 48	0 52
3 Su		Nice, clean fly! Born and bred in the privy! Ugh!	5 6	6 49	1 27
4 Mo		The fly is the disseminator of dirt and disease.	5 5	6 49	1 58
5 Tu		Night air is dangerous—if it's last night's air.	5 4	6 50	2 25
6 We		Bedbugs are clean, compared with flies.	5 3	6 50	2 48
7 Th		The insanitary privy is the fly's heaven.	5 2	6 51	3 18
8 Fr		Health and comfort demand that we keep out flies.	5 1	6 52	3 44
9 Sa		Boundary line between North Carolina and South Carolina surveyed, 1765.	5 0	6 53	rises
10 Su		Memorial Day. Second Continental Congress assembled at Philadelphia, 1775.	4 59	6 54	8 35
11 Mo		God bless the man who first invented screens.	4 58	6 54	9 48
12 Tu		A fly in the milk often means a baby in the grave.	4 57	6 55	10 50
13 We		1st English settlement in America, Jamestown, 1607.	4 56	6 56	11 40
14 Th		Vaccination first tried, 1796. Got your screens up?	4 55	6 57	morn
15 Fr		It costs less to build a privy than to shroud a corpse.	4 54	6 58	0 19
16 Sa		Clean up—and keep clean.	4 53	6 59	0 49
17 Su		Flies breed and live in filth.	4 53	7 0	1 14
18 Mo		Cleanliness is a civic, social and health requirement.	4 52	7 1	1 34
19 Tu		The typhoid fly is a menace to public health.	4 52	7 1	1 52
20 We		Mecklenburg Declaration, 1775. North Carolina Convention adopted Ordinance of Secession, 1861.	4 51	7 2	2 17
21 Th		First aid to the dyspeptic—a good laugh.	4 50	7 3	2 34
22 Fr		What we eat today is working and thinking tomorrow	4 49	7 3	2 57
23 Sa		When flies come in at the door, health flies out of the window.	4 48	7 4	3 23
24 Su		Gov. Martin, last of the royal governors, fled the province, 1776.	4 48	7 5	3 56
25 Mo		Eat in a hurry—die in the same way.	4 48	7 5	sets
26 Tu		The only good fly is a dead fly.	4 47	7 6	9 13
27 We		Screens in the windows keep crape from the door.	4 47	7 7	10 4
28 Th		North Carolina admitted to the Confederacy, 1861.	4 46	7 8	10 50
29 Fr		"Civic pride" for a dirty city is false pride.	4 46	7 9	11 29
30 Sa		Federal Memorial Day.	4 45	7 10	11 59
31 Su		A grocer's best advertisement is cleanliness.	4 45	7 11	morn

MOON'S PHASES.

	D	H	M		D	H	M
☾ First Quarter,	3	1	15 morning	☾ Last Quarter,	16	4	58 evening
☾ Full Moon,	9	4	17 evening	☾ New Moon,	24	9	21 evening

THINGS TO DO ON THE FARM IN MAY.

1. Keep the cultivators going. Stay ahead of the grass by using harrows and weeders. Keep land level and surface thoroughly firmed.
2. See that the boys and girls have a share in the farm work. If the boys have not a corn or cotton acre, give them a pig or a calf. Interest the girls in tomato growing or poultry raising.
3. Look closely after the health of the chickens. Use disinfectants and whitewash freely. Market the early cockerels as soon as large enough.
4. Keep on spraying. Use Bordeaux and Paris green on apple trees and Irish potatoes. Bordeaux on grapes and tomatoes, self-boiled lime-sulphur to prevent peach rot.
5. Fix up the kitchen for hot weather. See that the screens are in good working order. Make or buy a fireless cooker or get an oil stove. Arrange to keep milk and butter cool.
6. Keep the grounds about the house in order. Use the lawn-mower. Keep chickens and pigs out of the yard. Screen in one of the porches for a resting place.

FOR CHILBLAINS—Bathe the sore parts with crude oil each night before retiring. As this will make grease strains on the bed-clothes it is well to wrap in muslin and then in oiled silk.

STRUCK BY LIGHTNING—When a person is struck by lightning, dash cold water over the face, neck and breast. As they recover they should be kept quiet. If the feet are cold apply hot-water bag.

CARE OF SICK ROOM—Avoid loud talking or whispering: either are objectionable to a sick person. Turn the pillows frequently and arrange the bedclothes quietly. Assist the patients to change their positions and anticipate their wants in giving drink, nourishment, etc., but avoid being "fussy." A nervous person would prefer neglect to being needlessly questioned. Never sit upon a sick person's bed unless requested especially to do so. Darken the room to a mellow twilight, and so ventilate the room that a draught of air will not blow directly upon the patient. Wear slippers or cloth shoes and let everything about the room be neat and your movements quiet.

To relieve pain from bruises, and prevent discoloration and subsequent stiffness, nothing is more efficacious than fomentations of water as hot as can be borne.

Five or ten minutes spent every morning during winter in rubbing the body briskly with a flesh brush, or piece of flannel over the hand, will do much to keep the skin active and prevent colds.

For frost bites, keep away from the fire and rub the parts affected with snow or iced water until thawed, then treat as you would a burn.

When the eyes are tired, or inflamed from loss of sleep, apply an old linen handkerchief dripping with water as hot as you can possibly bear it.

Every family should have a preparation of flaxseed oil, chalk, and vinegar about the consistency of thick paint constantly on hand for burns and scalds. The best application in cases of burns and scalds is a mixture of one part of carbolic acid to eight parts of olive oil. Absorbent cotton, lint or linen rags are to be saturated with the lotion and spread smoothly over the burned part, which should then be covered with oil silk or gutta serena tissue to exclude air. If none of these remedies are available exclude the air from the injured part by wrapping it in cotton batting.

SOME BUYING DON'TS FOR HOUSEWIVES.

Don't buy unprotected food exposed to flies.

Don't buy unprotected food exposed in dirty shops.

Don't buy food where employes are unclean.

Don't buy food where cats and dogs are allowed.

Don't buy food exposed to street dust.

Don't buy food where careless coughers and pitters are allowed.

Don't blame when you can praise.




Don't fail to tell grocers why you don't approve of their insanitary conditions.

Don't fail to be constructive in your criticisms.

Don't rest until your town has a salaried inspector and health officers.

Day of Month ay of Week	Important Days, Dates and Healthgrams	Sun		Moon
		Rises	Sets	Rises or Sets
1 Mo	Bathe thirty times this month.	4 44	7 11	0 28
2 Tu	See that the baby gets fresh and pure milk.	4 44	7 11	0 51
3 We	Jefferson Davis born, 1808. Starve the fly.	4 43	7 12	1 19
4 Th	Convention for revising the Constitution met in Raleigh, 1835.	4 42	7 12	1 42
5 Fr	Keep the baby in the fresh air as much as possible.	4 41	7 13	2 12
6 Sa	God made mother's milk for the baby and cow's milk for calves.	4 41	7 13	2 46
7 Su	Dirty milk is death to babies. [Island, 1585.	4 41	7 14	3 31
8 Mo	Sir Thomas Drake anchored his fleet off Roanoke	4 41	7 14	rises
9 Tu	If the baby is sick, send for the doctor at once.	4 41	7 15	9 28
10 We	Battle of Bethel, 1861. Henry L. Wyatt killed; first Confederate soldier to fall in the Civil War.	4 41	7 15	10 14
11 Th	Spare the ice and spoil the milk. [babies.	4 41	7 16	10 48
12 Fr	Puppies couldn't survive the treatment given some	4 41	7 16	11 15
13 Sa	Keep the milk, the bottles and the baby away from flies.	4 41	7 16	11 38
14 Su	National Flag Day. Screen the kitchen.	4 41	7 17	11 56
15 Mo	Magna Charta granted, 1215. Washington appointed Commander-in-chief of Continental forces, 1775.	4 41	7 17	morn
16 Tu	A nursing tube is a tunnel to death.	4 41	7 17	0 19
17 We	Battle of Bunker Hill, 1775.	4 41	7 18	0 38
18 Th	United States declared war against Great Britain, 1812. Battle of Waterloo, 1815.	4 41	7 18	0 59
19 Fr	Dress your baby to keep him comfortable and happy.	4 42	7 19	1 24
20 Sa	Community health is purchasable.	4 42	7 19	1 55
21 Su	Summer begins. Capitol at Raleigh burned, 1831.	4 43	7 19	2 32
22 Mo	Longest day in the year. Screen the dining room.	4 43	7 19	3 18
23 Tu	Well kept alleys pay bigger dividends than well kept	4 43	7 19	sets
24 We	Bathe the baby every day. [cemeteries.	4 43	7 19	8 48
25 Th	Gov. Tryon proclaims repeal of the Stamp Act, 1776.	4 43	7 19	9 30
26 Fr	A dirty neighbor is a menace to neighborhood health.	4 43	7 19	10 3
27 Sa	Dr. Elisha Mitchell perished while exploring the top of Mt. Mitchell, 1857.	4 43	7 20	10 31
28 Su	Battle of Monmouth, 1778.	4 44	7 20	10 56
29 Mo	Good health is wealth; ill health is poverty +	4 44	7 20	11 25
30 Tu	Second charter of North Carolina issued by King Charles II, 1665.	4 44	7 20	11 46

MOON'S PHASES.

	D	H	M		D	H	M
 First Quarter,	1	8	49 morning	 Last Quarter,	15	9	6 morning
 Full Moon,	8	0	4 morning	 New Moon,	23	10	19 morning
				 First Quarter,	30	2	10 evening

THINGS TO DO ON THE FARM IN JUNE.

- Keep up rapid, shallow, level cultivation of the crops. If a dry spell comes, all the moisture in the soil will be needed.
- Cut the wheat and oats as soon as they have colored up well. Don't let them get "dead ripe." Make a special effort to get them under shelter or in stack without injury from rain.
- Cut grass and red clover when in full bloom. Much hay is allowed to get too ripe.
- Keep an eye on the health of your hogs. If any get sick, or if cholera breaks out near you, get in touch with your State Department of Agriculture and prepare to inoculate against cholera.

HEALTH RULES.

Formulated and adopted by the Association for the Prevention of Tuberculosis, Washington, D. C.

1. Good air. Avoid badly ventilated, badly lighted, dusty, dirty, overheated, or crowded rooms.

2. Avoid house dust. Breathing dust, notably house dust, often causes disease. Have no tacked down carpets and mattings. Have loose pieces of rugs, and clean them frequently outdoors. Keep lower sashes closed while sweeping or dusting. Open upper sashes. Never sweep rooms with a broom that raises dust.

3. Pure water. Drink pure water. Avoid water from shallow and unprotected wells, and from ponds and streams. If in doubt boil the water. Some corner pumps are dangerous. Filtered river water is safe to drink. Avoid public drinking cups.

4. Safe milk and cream. Tuberculosis, typhoid fever, and other diseases are often caused by drinking dirty raw milk and raw cream. Investigate your dairyman. Patronize the dealer with clean, up-to-date methods.

5. Keep clean. Take a bath or sponge daily, and a warm bath, followed by a cold splash, plunge or shower, once or twice a week or oftener. Use soap freely. Wash your hands before handling food. Don't put fingers, money, paper or pencils in your mouth. Don't bite your finger nails. Clean your teeth morning and evening.

6. Food. Don't eat raw food that was exposed to flies or dust or touched by unclean hands. Fruits or vegetables so exposed should first be rinsed or washed thoroughly. Chew your food well. Tea, coffee, and alcohol are stimulants, not foods.

7. Sleep. Get enough sleep. Sleep with windows open, or better still, outdoors.

8. Head up. Sit and stand erect. Practice deep breathing. Breathe through your nose.

9. Exercise. Take plenty of outdoor exercise, but avoid excess in athletics. It may cause heart trouble. Don't eat or drink when overheated by exercise.

10. Liquor and tobacco. Avoid tobacco and liquors. They are especially injurious to the young. Alcohol is a preservative, but not of the health.

11. Don't neglect colds. Don't neglect coughs or colds. If you do not get well soon, go to a doctor or dispensary for treatment. Never cough, sneeze, or breathe into another person's face. Don't spit on floors, sidewalks, or street cars.

12. Sunshine. Admit plenty of sunshine into your houses and into your lives. Cultivate cheerfulness and kindliness; it will help you to resist disease. Your mind acts on your body.

OPHTHALMIA NEONATORUM, OR NEW-BORN BABIES' SORE EYES.

New-born babies' sore eyes are due to the gonococcal infection entering the eyes of the baby at the time of or shortly after birth. It may be prevented by dropping into each eye one drop of a one per cent solution of silver nitrate. This is washed out immediately with a saline solution. If such precautions are not taken and the disease develops and runs its course unchecked, the sight is often totally destroyed in two weeks.

7th Month.

JULY, 1914.

31 Days.

Day of Month	Day of Week	Important Days, Dates and Healthgrams	Sun		Moon
			Rises	Sets	Rises or Sets
1 We		Battle of Gettysburg began, 1863.	4 45	7 20	morn
2 Th		The first summer boarder—the typhoid fly.	4 46	7 20	0 12
3 Fr		Pettigrew's charge at Gettysburg, 1863.	4 47	7 20	0 44
4 Sa		Declaration of Independence, 1776.	4 47	7 20	1 22
5 Su		First landing of English at Roanoke Island, 1584.	4 48	7 19	2 11
6 Mo		Kill all flies that get into the house.	4 48	7 19	3 10
7 Tu		No spit—no consumption; no filth—no flies.	4 49	7 19	rises
8 We		Flies in the dining room precede nurses in the sick room.	4 50	7 19	8 45
9 Th		Avoid the public drinking cup. It spreads disease.	4 50	7 19	9 16
10 Fr		Christopher Columbus born, 1447.	4 51	7 18	9 39
11 Sa		"Dog Days" begin. Dirt is deadly.	4 52	7 18	10 0
12 Su		Don't buy food where flies are tolerated.	4 52	7 18	10 20
13 Mo		Put a top to the well—a stop to the fever.	4 53	7 17	10 43
14 Tu		Beginning of French Revolution, 1789.	4 53	7 17	11 3
15 We		Eat clean food, drink pure water, and be merry.	4 54	7 16	11 25
16 Th		Take a bath every morning and every evening.	4 55	7 16	11 53
17 Fr		Filth and health never make good bed fellows.	4 55	7 15	morn
18 Sa		Eat plenty of fruits and vegetables in summer.	4 56	7 15	0 27
19 Su		Patriots of the Cape Fear capture and burn Fort Johnston, 1775.	4 57	7 14	1 9
20 Mo		Keep your temper cool and your body will not get so hot.	4 57	7 13	1 58
21 Tu		Battle of Bull Run, 1861.	4 58	7 13	2 56
22 We		Wear thin, porous clothing in hot weather.	4 59	7 12	4 0
23 Th		City of Raleigh founded on Roanoke Island, 1587.	5 0	7 12	sets
24 Fr		If you can not work outdoors, sleep outdoors.	5 0	7 11	8 34
25 Sa		Keep your head cool and your heart warm.	5 1	7 11	9 0
26 Su		The best hot weather drink—cool water.	5 2	7 10	9 23
27 Mo		Preventable diseases are born of ignorance.	5 3	7 9	9 51
28 Tu		The manure heap is the chief breeding place for flies.	5 3	7 8	10 16
29 We		\$2 for a doctor is cheaper than \$100 for a funeral.	5 4	7 7	10 44
30 Th		Don't take medicine for sleeplessness—take a bath.	5 5	7 7	11 21
31 Fr		The city dump is a city disgrace.	5 6	7 6	morn

MOON'S PHASES.

	D	H	M		D	H	M
☺ Full Moon,	7	8	46 morning	☾ New Moon,	22	9	24 evening
☾ Last Quarter,	15	2	18 morning	☾ First Quarter,	29	6	37 evening

THINGS TO DO ON THE FARM IN JULY.

- Remember when you lay by the crops to cultivate shallow and leave the land level—don't cut the roots or make ditches.
- Plant peas in the corn as you finish it, and plant all lands not otherwise employed to some manure or feed crop.
- Build a silo—that is, if you have made any provision to fill it. Clean up and patch up about the barn.
- Get all hay crops under shelter or in good stacks. Take care of the straw after threshing. Begin making arrangements to care for the corn without the useless labor of fodder pulling.
- Keep on planting in the garden—and don't forget a patch of late roasting-ears and a patch of popcorn.
- Have a consultation with the lady of the house and see that the screens are all right, that she has a fireless cooker and that she can get water without carrying it.

THE OLD ROLLER TOWEL.

How dear to our hearts are the things
 of our childhood,
 When fond recollections present
 them to view;
 The old district schoolhouse, the pail
 and the dipper,
 The same cud of gum which in turn
 we would chew.
 No fear of a microbe forever beset us,
 No state board of health interfered
 then at all;
 We bashed dirty faces in one common
 basin,
 And turned to the towel that hung
 on the wall.
 The old roller towel, the stiff roller
 towel,
 The germ-laden towel that hung on
 the wall.
 Of crash was this towel, in gen'rous
 proportion,
 And never was changed more than
 once in a week;
 We turned it around and used it all
 over,
 And for a dry spot it was idle to
 seek,
 With use and abuse it grew grayish
 in color,
 Acquiring an odor exceedingly rank;
 By Saturday night it presented a sur-
 face
 As hard and unyielding as any inch
 plank.
 The old roller towel, the stiff roller
 towel,
 From which the fastidious foolishly
 shrank.
 But now it is gone, vanished out of ex-
 istence,
 By virtue of power which the Board
 of Health holds;
 No more can we bury our streaming
 wet faces
 Within its bacterial, dangerous folds.
 No longer we meet with the discolored
 banner,
 Which hung from a roller nailed up
 on the wall;
 On clean huckabuck, initial embroid-
 ered,
 We wipe away tears which intru-
 sively fall
 For old roller towels, the stiff roller
 towels,
 The germ laden towels that hung on
 the wall.

—George White, in the *Randolph Herald*.

THE WOMAN WITH THE HOE.

Last spring the press of the State carried the following news item, which is here changed only enough to conceal the name and locality:

"Mrs. B. I. Avey, who lived about one mile north of Axeton, was found dead near her home yesterday afternoon at about 4 o'clock. She had been planting corn and had fallen into a ditch in the field. She leaves a large family, all of whom are grown and living in this community. She was about seventy-five years old and a consistent member of the Blank church of this place. She was buried at Sunrise cemetery today."

They have told how she died—this woman with the hoe. But no one has thought it worth while to explain why she died as she did—why an old woman who has passed her three-score years and ten, and who had often trod the perilous path of motherhood, should be digging in the field for bread, as women did thousands of years ago. We have doubled the yield of corn, but a withered old woman must still answer the call of seedtime and go out into the field with the hoe. Ten thousand automobiles go back and forth in this State, lifting the burdens from the beasts of the field, but no way was found to lift the burden of the hoe from her bent figure as it tottered over the broken ground to a tragic death.

The burden of labor, like all other burdens, follows the line of weakest resistance, and it is resting heavier and heavier on the shoulders least able to bear it because least able to resist it. Yet men marvel that women in England are moved to madness and women the world over are protesting against the old order of life—against the woman with the hoe. In this highly Christianized commonwealth many can tell of the child widows of India and the foot-bound women of China, but they

Day of Month Day of Week	Important Days, Dates and Healthgrams	Sun				Moon	
		Rises		Sets		Rises or Sets	
1 Sa	Council of Safety at Halifax officially proclaimed the Declaration of Independence, 1776.	5	6	7	5	0	7
2 Su	No mosquitoes—no malaria. [born, 1729.	5	7	7	4	1	0
3 Mo	Richard Caswell, first governor after independence,	5	8	7	3	2	2
4 Tu	A little ditch is sometimes better than pounds of quinine. [terity.	5	9	7	2	3	10
5 We	Money invested in health pays dividends to pos-	5	10	7	1	rises	
6 Th	A little tin can may breed a host of mosquitoes.	5	11	7	1	7	42
7 Fr	Good water is more to be prized than rubies, and clean hands are better than much fine gold.	5	11	7	0	8	3
8 Sa	Fight the mosquito by destroying its breeding place.	5	12	6	58	8	22
9 Su	A good housekeeper's house is free from flies.	5	13	6	56	8	47
10 Mo	It is better to be healthy than pretty.	5	13	6	55	9	5
11 Tu	Flies on the table are worse than bugs in the bed.	5	14	6	54	9	26
12 We	Stale milk is poison to the baby.	5	15	6	53	9	52
13 Th	Indian chief, Manteo, baptized at Roanoke Island, 1587. First baptismal service by English-speaking people in the New World.	5	16	6	52	10	24
14 Fr	Save your teeth and you save your digestion.	5	17	6	51	11	2
15 Sa	A fly in the kitchen is as dangerous as a rattlesnake.	5	18	6	50	11	47
16 Su	A barrel full of rain water—a house full of mosquitoes.	5	19	6	49	morn	
17 Mo	You can't buy good health at the drug store.	5	19	6	48	0	41
18 Tu	Virginia Dare born on Roanoke Island, 1587. First child born of English-speaking parents in America.	5	20	6	46	1	42
19 We	A little dirty milk can ruin a lot of clean milk.	5	21	6	45	2	49
20 Th	Civic uncleanness kills civic pride.	5	21	6	44	3	59
21 Fr	Stick close to the simple life.	5	22	6	43	sets	
22 Sa	Thomas Fanning Wood, first Secretary State Board of Health, died, 1892.	5	23	6	42	7	26
23 Su	Food left between the teeth ferments and causes decay. [soul.	5	24	6	40	7	57
24 Mo	Health is a normal functioning of body, mind and	5	25	6	39	8	19
25 Tu	First Provincial Congress of North Carolina met at	5	26	6	38	8	47
26 We	Patronize the clean grocer. [New Bern, 1774.	5	26	6	36	9	23
27 Th	Battle of Long Island, 1776.	5	27	6	35	10	4
28 Fr	The first wealth is health.	5	28	6	33	10	55
29 Sa	A filling in time saves a tooth—and a digestion.	5	28	6	32	11	55
30 Su	Tubercular dairy cows are a menace to the public.	5	29	6	31	morn	
31 Mo	If common hair brushes, why not common tooth brushes?	5	30	6	30	0	58

MOON'S PHASES.

	D	H	M		D	H	M
☺ Full Moon,	5	7	27 evening	☾ New Moon,	21	7	12 morning
☾ Last Quarter	13	7	42 evening	☾ First Quarter,	27	11	38 evening

THINGS TO DO ON THE FARM IN AUGUST.

1. Keep up the cultivation of late crops and of the garden; chances are that all the moisture in the soil will be needed.
2. Make hay—cut the peavines as fast as the pods begin to turn and take care of everything that will make good feed.
3. Refrain from pulling fodder, and arrange to save the corn crop in a more economical manner.

have hardly heeded the burden-bearer—the woman with the hoe—in their own fair land of plenty.

So they laid her away—this old woman, whose life was no less tragic than her death—and in a thousand churches they can tell how she led a Christian life and how her soul now rests in peace, awaiting the great day when labor and sorrow shall cease and she shall stand face to face with her God to receive her reward—as if Christ did not say, “God is not the God of the dead, but for the living.”—*State Journal*.

FRESH AIR MAXIMS STOLEN AND REMASHED.

Colds are easily “caught” but hard to lose.

Coddle yourself and you invite pneumonia.

Pure air makes pure blood; pure blood makes you disease-resisting.

Don't hibernate; ventilate.

Pure air for bodily and mental vigor; impure air for inefficiency.

Fresh air is the certain means for raising the limit for “Oslerization.”

Coddling—preparing for consumption and pneumonia.

Fresh air makes the fires of life burn brightly.

Consumption comes with a hack and cough and goes with a hack and coffin.

Sleep with open windows. “Make health while the moon shines.”

Better keep on being a fresh air fiend, even if it is cold.

THE STUDENT'S HEALTH CREED.

I believe my body and good health are sacred. If I am sick it will very probably be because I have violated one or more of Nature's laws of health.

I will study Nature's laws of health and will obey them for my own sake.

I will not suck my fingers, or pick my nose or wipe my nose on my hand or sleeve, for these practices are insanitary and very impolite.

I will not wet my fingers in my mouth when turning the leaves of books.

I will not put pencils in my mouth or wet them with my lips.

I will not put pins or money in my mouth.

I will not buy or use chewing gum nor buy and eat cheap candies.

I will use my mouth only for eating good, plain food, drinking pure water and milk, and for saying good and kind words.

I will always chew my food thoroughly, and never drink whiskey or wine.

I will strive against the habit of “clearing my throat” because it is nearly always unnecessary, and may be disagreeable to others.

I will not cough or sneeze without turning my face and holding a piece of paper or handkerchief before my mouth. Polite people never cough in public if they can prevent it.

I will keep my face, hands, and finger nails as clean as possible.

I will not spit on the floor, stairways or sidewalks, and will try not to spit at all; ladies and gentlemen do not spit.





I will wash my mouth every morning on getting up and at night on going to bed, and will use a toothbrush if I can get one.

I will be clean in body, clean in mind, and avoid all habits that may give offense to others.

I will get all the fresh air I can and will open wide my bedroom windows when I go to bed.

Day of Month	Day of Week	Important Days, Dates and Healthgrams	Sun		Moon
			Rises	Sets	Rises or Sets
1 Tu		Beware of ground itch.	5 31	6 28	2 6
2 We		No soil pollution—no hookworm. [Britain, 1783.	5 32	6 27	3 14
3 Th		Peace of Paris between the United States and Great	5 33	6 25	4 22
4 Fr		Wear shoes to prevent hookworm disease.	5 34	6 24	rises
5 Sa		First Continental Congress met at Philadelphia, 1774.	5 35	6 22	6 52
6 Su		Constitutional Convention met at Raleigh, 1875.	5 35	6 21	7 11
7 Mo		Labor Day. Dr. Richard H. Lewis made Secretary of State Board of Health, 1892.	5 36	6 19	7 30
8 Tu		The hookworm is about as thick and half as long as a pin. [worm.	5 36	6 18	7 54
9 We		The sanitary privy is the lasting enemy of the hook-	5 37	6 16	8 23
10 Th		Victory of the Americans under Com. Perry on Lake	5 38	6 15	8 57
11 Fr		Battle of Brandywine, 1777. [Erie, 1813.	5 38	6 14	9 39
12 Sa		A hookworm in the body is a load on the back.	5 39	6 12	10 29
13 Su		Use a sanitary privy and make others use it.	5 40	6 11	11 25
14 Mo		Don't forget to bathe every day.	5 41	6 10	morn
15 Tu		Wm. A. Graham born, 1804. Wm. Taft born, 1857.	5 42	6 8	0 29
16 We		Hookworm disease is prevented by using a sanitary privy.	5 43	6 6	1 36
17 Th		The man who pollutes the soil deserves sickness.	5 44	6 5	2 48
18 Fr		Constitution of the United States adopted, 1787.	5 45	6 4	4 2
19 Sa		Hookworm disease can be cured by thymol.	5 45	6 2	5 19
20 Su		If you want smallpox, don't get vaccinated.	5 46	6 1	sets
21 Mo		Beginning of autumn.	5 46	6 0	6 47
22 Tu		Massacre of white settlers on Neuse River by Tuscarora Indians, 1711. Beginning of the great Indian wars of 1712-1715.	5 47	5 58	7 20
23 We		Victory of Paul Jones off Flamborough Head, 1779.	5 48	5 56	8 0
24 Th		A little thymol can transform a hookworm sufferer.	5 49	5 54	8 50
25 Fr		A physic is a poor substitute for exercise and temperance.	5 50	5 53	9 47
26 Sa		Battle of Charlotte and defeat of Cornwallis, 1780.	5 50	5 52	10 51
27 Su		This is the age of baths, not of perfumes.	5 51	5 50	11 59
28 Mo		Ship with stamps for use in North Carolina arrived in the Cape Fear River, 1765.	5 51	5 49	morn
29 Tu		Chew your food—your stomach has no teeth.	5 52	5 47	1 6
30 We		Put nothing into the mouth but food and drink.	5 53	5 46	2 13

MOON'S PHASES.

	D	H	M		D	H	M
 Full Moon,	4	8	47 morning	 New Moon,	19	4	19 evening
 Last Quarter,	12	0	34 evening	 First Quarter,	26	6	49 morning

THINGS TO DO ON THE FARM IN SEPTEMBER.

1. Save feed—cut and shock the corn if you have no silo, shredding or cutting it up later if you can; harvest everything that will make good hay, and store and stack it so that it will keep.
2. Save seeds—select cotton and corn for next year's planting if you do not expect to buy from some one who has better than you have; don't put it off till next spring and then plant poor seed.
3. Sow oats if land can be made ready; keep land intended for wheat well stirred; use a grain drill to put in oats if possible.
4. Sow rape, crimson clover, turnips, etc., for pasture and winter cover.
5. Get in the winter's wood and store it in the dry; fix a walk to the woodshed if there is none.
6. Figure a little and see if you cannot afford to put in a water supply system before cold weather comes; if you find you can do it at all, go ahead—it will pay.

BABY.

What is a baby?

"About twenty-two inches of coo and wriggle, writhe and scream, filled with suction and testing apparatus for milk, and automatic alarm to regulate supply."

"It's a sweet and tiny treasure,

A torment and a tease.

It's an autocrat, an anarchist,

Two awful things to please.

It's a rest and peace disturber,

With little laughing ways.

It's a wailing human night alarm,

And terror of your days."

"The bachelor's horror, the mother's treasure, and the despotic tyrant of the most republican household."

"A stranger with unspeakable cheek, that enters a house without a stitch to his back, and is received with open arms by every one."

"A bold asserter of the rights of free speech."

"A diminutive specimen of perverse humanity that could scarcely be endured if he belonged to any one else, but, being our own, is a never-failing treasury of delight."

IS IT ANY WONDER?

Out in Kansas we find a newspaper that starts back at the root of things. They don't mince words either, and when you get through reading what they have to say you will agree that it is no wonder some of us have to die:

Man drinks whiskey that clogs the valves; he drinks beer and that clogs the wheels; he downs lemonade, ginger ale, buttermilk, iced tea, coffee, and what not, and then wonders why the boilers do not burst. If you should take an ox and put him through a like performance, he would be dead in a month. The simplest and plainest laws of health are outraged every day

by the average man. Did Adam smoke? Did Eve wear a corset? Did Solomon chew tobacco? Did the children of Israel make for a beer garden after crossing the Red Sea? Did Rebecca chew chocolate bonbons and ice cream and call for soda water?

Adam was the first man, and was made perfect from head to heel—how long would he remain so after eating pie before going to bed? Suppose he had slept in a bedroom five-by-seven, with the windows closed down, the doors shut, and two dogs under the bed?

Suppose Eve had been laced up in a corset, worn tight shoes, hobble fileaves, and sat up all hours of the night eating chicken salad and Welsh rarebits and trying to keep on four pounds of dead people's hair?—*Kansas City Star*.

WHY BLAME PROVIDENCE?

How long will it be before the usual resolutions of condolence, which now begin "Whereas, it has pleased our Heavenly Father to remove from our midst our beloved Brother or Sister who surrendered this life after a long illness from typhoid fever," shall be changed to read,

"Whereas, another case of criminal negligence has occurred in this community, through the death of Mr. or Mrs. ———, resulting from the drinking of water from a polluted public supply. A coroner's jury has affixed the blame on certain careless private parties and some public officials, and recommends that they be held for manslaughter. The county attorney has determined that such shall not occur again, and will push prosecution.

This is the headline in case of automobile accidents—why not in the latter instance? It's a poor rule that fails to work both ways. Anyhow, why blame the Lord? He has enough charged to him by short-sighted and unthinking mankind.—*Bulletin of the Kansas State Board of Health*.

10th Month.

OCTOBER, 1914.

31 Days.

Day of Month	Day of Week	Important Days, Dates and Healthgrams	Sun		Moon
			Rises	Sets	
1 Th		Cool weather does not call for closed windows.	5 54	5 44	3 18
2 Fr		The best guide to dress is the weather.	5 55	5 43	4 20
3 Sa		Keep the children at home when there is diphtheria in the neighborhood.	5 56	5 41	5 18
4 Su		Battle of Germantown, 1777.	5 57	5 40	rises
5 Mo		Prevention is better than cure, and far cheaper.	5 58	5 39	5 57
6 Tu		Laying of cornerstone of Salem Academy, oldest school for girls in the South, 1803.	5 59	5 38	6 25
7 We		Defeat of British at Kings Mountain, 1780.	6 0	5 36	6 58
8 Th		Antitoxin destroys the poison generated by diphtheria germs.	6 1	5 35	7 37
9 Fr		Keep the screens up another month.	6 2	5 34	8 22
10 Sa		Antitoxin is a sure cure for diphtheria, but there is danger in delay.	6 3	5 32	9 14
11 Su		Great epidemics from little sore throats grow.	6 3	5 30	10 15
12 Mo		Columbus landed in America, 1492.	6 4	5 29	11 18
13 Tu		Antitoxin is to diphtheria what sunshine is to snow.	6 5	5 28	morn
14 We		Morning eye-opener—a pint of water—inside.	6 6	5 27	0 26
15 Th		Have your cows tuberculin tested.	6 7	5 25	1 37
16 Fr		A syringe of antitoxin is better than volumes of advice.	6 8	5 24	2 49
17 Sa		Burgoyne's surrender, 1777. Rockefeller Hospital opened, 1910.	6 9	5 23	4 4
18 Su		A dirty home is a dangerous home.	6 9	5 21	5 19
19 Mo		Surrender of Cornwallis at Yorktown, 1781.	6 10	5 19	sets
20 Tu		Sunshine will keep you young.	6 11	5 18	5 52
21 We		Rockefeller creates Hookworm Commission, 1909.	6 12	5 17	6 39
22 Th		To cure consumption—begin early.	6 13	5 16	7 35
23 Fr		Don't overwork your digestion if you would keep healthy.	6 14	5 15	8 41
24 Sa		A light overcoat is better than a heavy cold.	6 15	5 14	9 49
25 Su		Wash your neck—inside.	6 16	5 12	10 58
26 Mo		Every cold weakens the system.	6 16	5 11	morn
27 Tu		Theodore Roosevelt born, 1858.	6 17	5 10	0 4
28 We		A little forethought is the best ally of common sense.	6 18	5 9	1 11
29 Th		Never stay in a close room.	6 19	5 8	2 15
30 Fr		Common sense is the best protection from colds.	6 21	5 6	3 14
31 Sa		Hallowe'en. Have you been vaccinated?	6 22	5 5	4 13

MOON'S PHASES.

	D	H	M		D	H	M
☺ Full Moon,	4	0	45 morning	☾ New Moon,	19	1	19 morning
☾ Last Quarter,	12	4	19 morning	☾ First Quarter,	25	5	30 evening

THINGS TO DO ON THE FARM IN OCTOBER.

1. Sow wheat and oats; get the oats in as soon as possible; treat seed of both crops with formalin or bluestone if smutty, and look out for cheat and other weed seeds.
2. Keep on sowing cover crops; still time to sow rye, vetch, crimson clover; also rape and winter turnips.
3. Put the turning plows to work, especially on clay soils; if you subsoil, this is the time for it.
4. Take special care of the land to prevent winter washing; fix up terraces, open out ditches, etc.; under-drain where it is needed.
5. Get the corn and corn stover under shelter early; look after all late crops that will make feed.
6. Store the cotton under shelter; and keep it picked off as closely as practicable.

HEALTH HINTS WORTH REMEMBERING.

That a bag of hot sand relieves neuralgia.

That warm borax water will remove dandruff.

That a little soda water will relieve sick headache caused by indigestion.

That a cupful of strong coffee will remove the odor of onions from the breath.

That well-ventilated bedrooms will prevent morning headaches and lassitude.

That a cupful of hot water drunk before meals will sometimes relieve nausea and dyspepsia.

That one in a faint should be laid flat on the back, the clothes loosened and let alone.

That the best time to bathe is just before going to bed, as any danger of taking cold is thus avoided and the complexion is improved by keeping warm for several hours after leaving the bath.

STARTLING NEWS FOR THE UNMARRIED.

If you were asked the question, "Who live longer, married or single people?" you would very likely reply, single, because they have less to worry about.

Yet such is not the case, it seems. Professor W. L. Wilcox of Cornell University has been making comparisons between the number of married and unmarried people dying in the State of New York, not including Buffalo and New York City, and he found the death rate among unmarried men, from 20 to 29 years inclusive, to be fifty-seven per cent greater than among married men, and that, from 30 to 49 years, more

than twice as many unmarried men die.

Also, among unmarried women over 30 years, the death rate is higher than with their married sisters, reaching thirty-seven per cent greater between 50 and 59 years, inclusive.

THAT OLD OIL STOVE.

At this time of the year, when many feel that it is not cold enough to use the general heating system of the house, but is too cool to be entirely without heat, the use of portable gas or oil heating apparatus is a great convenience. Cleanliness and comparative low cost of operation make this type of heating deservedly popular. Unfortunately, many of these heaters are used without a flue pipe to carry off the products of combustion. The use of such heaters is to be deprecated. This is especially true of those devices of low efficiency that make it practically imperative that the doors and windows be kept closed if the object sought—that of raising the temperature of the room—is to be obtained. These heaters put a premium on insufficient ventilation. The current issue of a high-class monthly magazine carries a full-page advertisement of a gas heater that is specifically recommended for use in the children's play room. It is advertised as "the ideal heater for the nursery," and in heavy type the claim is made that it "will not vitiate the air." Such advertisements are dangerous, says the *Journal of the American Medical Association*. There may be times when one is willing to sacrifice health for comfort for a short time; when an increase of temperature in the room is sought, even at

Day of Month Day of Week	Important Days, Dates and Healthgrams	Sun		Moon
		Rises	Sets	Rises or Sets
1 Su	All Saints' Day.	6 22	5 5	5 12
2 Mo	All Souls' Day. Be a fresh air crank.	6 23	5 4	6 13
3 Tu	As the weather grows colder, take more exercise.	6 24	5 3	rises
4 We	Sunlight and fresh air kill the germs of consumption.	6 25	5 2	5 35
5 Th	Pure air promotes comfort and safeguards health.	6 26	5 1	6 21
6 Fr	Abraham Lincoln elected President of the United States, 1860. [1811.	6 27	5 0	7 9
7 Sa	Indians defeated by Gen. Harrison at Tippecanoe,	6 28	4 59	8 6
8 Su	A little ventilation is better than much quinine.	6 28	4 58	9 8
9 Mo	It's good for what ails you. What? Fresh air.	6 29	4 57	10 12
10 Tu	Consumption is difficult to cure but easy to prevent.	6 30	4 56	11 19
11 We	The tighter your house the tighter your colds.	6 32	4 55	morn
12 Th	Convention to form a State Constitution met at Halifax, 1776.	6 33	4 55	0 30
13 Fr	It is better to have faded carpets than faded cheeks.	6 34	4 54	1 41
14 Sa	Regulate your clothing according to the weather.	6 35	4 53	2 51
15 Su	Congress adopts Articles of Confederation, 1777.	6 36	4 53	4 7
16 Mo	It is better to sleep in a cold room than in a cold grave.	6 37	4 52	5 29
17 Tu	Suez Canal opened, 1869.	6 38	4 51	6 51
18 We	If war is hell, what is consumption?	6 39	4 51	sets
19 Th	A stuffy room is the germ's best ally.	6 40	4 50	6 20
20 Fr	Convention at Fayetteville adopted the Federal Constitution, 1790.	6 41	4 50	7 30
21 Sa	Drink plenty of water every day.	6 42	4 49	8 42
22 Su	Whiskey never cured consumption.	6 43	4 49	9 52
23 Mo	A little ventilator is a great protector.	6 44	4 49	10 59
24 Tu	Don't make a junk shop of your stomach.	6 45	4 48	morn
25 We	Evacuation of New York by the British, 1783.	6 46	4 48	0 6
26 Th	Thanksgiving Day.	6 47	4 47	1 9
27 Fr	What you don't eat seldom hurts you; what you do eat, often does.	6 48	4 47	2 5
28 Sa	We need as much fresh air in winter as in summer.	6 49	4 47	3 5
29 Su	Andrew Jackson, seventeenth President of the United States, born at Raleigh, 1808.	6 50	4 46	4 6
30 Mo	Signing of preliminary treaty of peace with Great Britain, 1782.	6 51	4 46	5 6

MOON'S PHASES.

	D	H	M		D	H	M
☾ Full Moon,	2	6	35 evening	☉ New Moon,	17	10	48 morning
☾ Last Quarter,	10	6	23 evening	☾ First Quarter,	24	8	25 morning

THINGS TO DO ON THE FARM IN NOVEMBER.

1. Get ready for winter; see that everything is snug about the house, the barns and poultry houses.
2. Get the crops in; put the cotton out of the weather; see that the roughage is under shelter or well stacked; store the apples, potatoes and late vegetables carefully.
3. Keep the plows going, breaking deep and thoroughly, and keep on sowing rye.
4. Set out fruit trees, shade trees, grape vines, berries, etc.; make a lawn if you have not a good one already.
5. If you are not following a rotation of crops, get to work and lay out one suited to your farm and circumstances, and get down to business farming.
6. Arrange for a supply of reading matter for yourself, your wife and the children—see that good lights are provided.

the expense of vitiated air. When this is done with a full knowledge of possible danger, it may not be too severely criticised. But to lead people to believe that any room can be heated healthfully for any length of time by means of flueless gas or oil heaters is dangerous doctrine.

An efficient gas or oil heater with a flue attachment is an admirable piece of household apparatus; a flueless heater—except for the most temporary of uses, and then used with a full knowledge of the dangers involved—is an abomination.

“WHERE THE WEAK GROW STRONG”

How North Carolina is Going After Tuberculosis

North Carolina has decided to handle her tuberculosis problem in a good, vigorous style. Down at Montrose, in the very heart of the sand hill region, and high up on a sand ridge amid the long leafed pines, is where “the weak grow strong” and the consumptives get well. The little sanatorium up there was reopened under the management of the State Board of Health only a few weeks ago, but already applications have been made for something like 35 or 40 of the fifty beds now available.

Within a few weeks more the present buildings will be filled. Fortunately, an extension to the present institution is well under way, and about the last of February it will be ready to take in 75 additional patients.

Sanatorium life is made as attractive for the patients enrolled as it is possible to make it, and infinitely better in every way for sick folks than the average home. The patient is informed when he arrives that his entire business for the next few months is to get well. He is shown how and why people get tuberculosis, and is also shown how the disease is combated, very largely by just the reverse methods of living

from those which brought about the condition. It is explained how foul air and closed bedroom windows tend to foster tuberculosis. From the accompanying cuts, as well as that shown on the front cover page, it will be seen how the patient is shown by example, as well as precept, about the marvelous curative power of fresh air.

The food given the patients is the very best that money can buy. Consumption is a wasting disease. In fact, loss of weight is one of the very first symptoms. A competent dietitian is in charge of the kitchen and dining room, and the diet of every patient is carefully watched and supervised. In fighting consumption, good, first class food, plenty of it, properly cooked and served in an appetizing way, counts for a tremendous lot.

The subject of very careful personal hygiene is taught every patient, not only by means of regular lectures by the medical director, but also according to careful personal supervision of the nurses. A recent visit to the sanatorium showed such scrupulous cleanliness and a degree of carefulness on the part of the patients that one could not help feeling that, so far as the danger of con-

Day of Month	Day of Week	Important Days, Dates and Healthgrams	Sun		Moon	
			Rises	Sets	Rises or Sets	
1 Tu		Swat consumption—buy Red Cross seals.	6 51	4 46	6 6	
2 We		Monroe Doctrine declared, 1823.	6 52	4 46	rises	
3 Th		Publication of first book ever printed in North Carolina, "The Yellow Jacket," a revisal of the laws, 1751.	6 53	4 46	5 6	
4 Fr		Whooping cough is highly contagious. [dertakers.	6 54	4 46	6 2	
5 Sa		Measles and whooping cough make business for un-	6 55	4 46	7 1	
6 Su		Pneumonia frequently follows measles. [smallpox.	6 56	4 46	8 5	
7 Mo		Scarlet fever causes four times as many deaths as	6 56	4 46	9 11	
8 Tu		It is criminal to expose children to whooping cough.	6 57	4 46	10 18	
9 We		If you never have measles you'll never miss it.	6 58	4 46	11 26	
10 Th		Many a cough ends in a coffin.	6 59	4 46	morn	
11 Fr		Constitution of North Carolina drafted by Convention at Halifax, 1776.	7 0	4 46	0 33	
12 Sa		Whooping cough in children is a "grave" disease.	7 1	4 46	1 45	
13 Su		Measles in a school is like fire in the tall grass. [1911.	7 2	4 46	3 2	
14 Mo		Death of Washington, 1799. South Pole discovered,	7 2	4 47	4 21	
15 Tu		Measles often paves the way for consumption.	7 3	4 47	5 41	
16 We		Boston "Tea Party", 1773. [Rights, 1776.	7 4	4 47	6 57	
17 Th		Convention at Halifax adopted the Declaration of	7 4	4 47	sets	
18 Fr		Convention at Halifax adopted first Constitution of the State of North Carolina, 1776.	7 5	4 48	6 17	
19 Sa		Measles causes 11 deaths to 1 from smallpox.	7 6	4 48	7 30	
20 Su		Cheap candy, expensive funeral. Why take chances?	7 7	4 48	8 42	
21 Mo		Landing of Pilgrim Fathers at Plymouth, 1620.	7 7	4 48	9 51	
22 Tu		First day of winter.	7 8	4 49	10 56	
23 We		Christmas will be merrier if you don't over eat.	7 8	4 50	11 53	
24 Th		Treaty of Ghent between the United States and Great Britain, 1814.	7 8	4 50	morn	
25 Fr		Christmas Day.	7 9	4 51	0 56	
26 Sa		Battle of Trenton, 1776.	7 9	4 52	1 56	
27 Su		Your nose is Nature's dust strainer. Breathe through it.	7 10	4 52	2 56	
28 Mo		Woodrow Wilson born, 1856.	7 10	4 53	3 56	
29 Tu		Don't let your palate get your stomach into trouble.	7 10	4 54	4 57	
30 We		General Assembly held first meeting in Raleigh, 1794.	7 11	4 55	5 54	
31 Th		Get the fresh air habit.	7 11	4 56	6 50	

MOON'S PHASES.

	D	H	M		D	H	M
☉ Full Moon,	2	1	7 evening	☾ New Moon,	16	9	21 evening
☾ Last Quarter,	10	6	18 morning	☾ First Quarter	24	3	11 morning

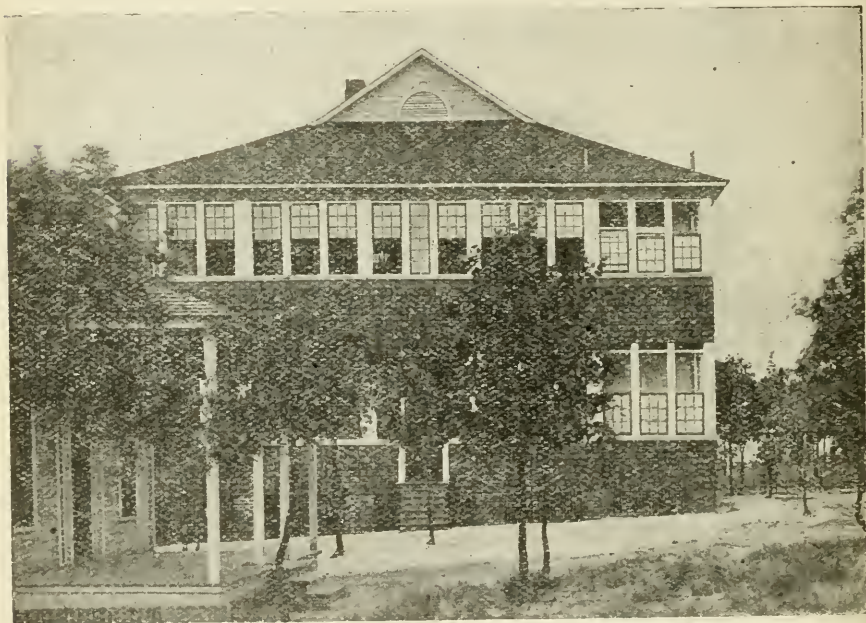
THINGS TO DO ON THE FARM IN DECEMBER.

- Find out what your year's work has profited you; take an inventory and find out what you are worth, and if your farming has paid.
- Get ready for next year's work; lay out the crops; find out what you need in the way of tools, stock, fertilizers, etc.; and arrange to farm on a business basis.
- Take at least one day off and visit your school and encourage the teacher and pupils a little; help the children with their studies and keep them enthusiastic.
- Make that splitlog drag and put it to work now while you have time; fix up the farm roads and the walks about the house.
- Look after fences; clean up stumps; dig ditches; fill gullies; drain wet lands.
- Make the winter evenings pleasant; provide plenty of fuel, good lights, good books and papers and some games and music.

tracting tuberculosis is concerned, the average person who goes to churches, moving picture shows, or who occasionally finds himself in company with people who cough or sneeze without holding handkerchiefs before their faces, is in far greater danger of contracting the disease than a person would be who

lived, ate and slept right among the patients at the sanatorium.

Any mention of this institution, however brief, would certainly be incomplete without at least a word in regard to those in direct charge of the patients, the medical director and the nurses. It is not necessary to mention personalities in this



THE MEN'S WARD—STATE SANATORIUM FOR THE TREATMENT OF TUBERCULOSIS.

A small house completely surrounded with porches. The windows are never closed except during storms, and then only on one or two sides.

connection, but the vitally important facts as regards the staff is that the medical director and every one of the nurses has had tuberculosis and been cured at a similar institution. They know the trials, the difficulties and discouragements of their patients as no one else does. They can feel for and sympathize with patients in their every effort to get well, and, best of all, the patients in

their charge look upon these people as elder brothers and sisters who sympathize with them and are willing to go the limit in helping them recover. Last of all, backed by such experience, such a staff not only knows all the ins and outs of curing tuberculosis, but with their personal knowledge and experience their patients have vastly more confidence in them than they would have in a

similar staff who have never had the personal experience of having consumption and recovering from it. Under such direction we may rea-

highly essential that treatment be undertaken as soon as possible.

For detailed information regarding the sanatorium or admission to



SIDE VIEW OF WOMEN'S WARD

State Sanatorium for the Treatment of Tuberculosis.

sonably expect the cure of fully eight-tenths of all the cases of incipient or early tuberculosis, and of half the moderately advanced cases. As the chances for recovery decrease rapidly as the disease advances, it is

it, inquiries should be addressed either to W. S. Rankin, Secretary of the State Board of Health, Raleigh, or to the Medical Director, State Sanatorium, Aberdeen, N. C.

THE STORY OF TUBERCULOSIS

What Everybody Should Know About Consumption Told in Simple Language

For many of us there is too much said about tuberculosis that is too technical or long drawn out, and not enough that is written in a simple straightforward style, giving just the plain, everyday facts that everybody should know. The Missouri Association for the Relief and Control of Tuberculosis say just about enough and say that right. Here is their story:

Tuberculosis is an infectious and communicable disease caused by the

growth of the tubercle bacillus within the body. This bacillus is a vegetable parasite, rod-shaped, and of such length that it would require ten thousand of them laid end to end to measure an inch. It lives a strictly parasitic life, which signifies that under ordinary circumstances it does not live indefinitely and propagate its kind outside of its living host, which may be man, almost any domestic animal, or one of the many animals that have not been brought under domestication. Though incapable of propagating itself outside of its living host, it is capable of living for a long period of time

under favorable conditions outside of the body.

These conditions which most favor the prolongation of its life outside of the body are darkness, moisture, and ordinary temperatures. It dies in a few minutes when exposed to direct sunlight, when not deeply imbedded in the albuminous discharges from the lesions which are characteristic of the disease. In the human body the commonest form of tuberculosis is consumption, or tuberculosis of the lungs, but it may occur in any part or organ of the body, especially in the bones, joints and lymph glands of children, in which structures it is known respectively as white swelling of bones and joints, and scrofula. It is a very common cause of hunchback and of meningitis in children.

The tubercle bacillus in the body stimulates the growth of cells which, under the influence of toxins or poisons which are elaborated by the bacillus, die, disintegrate, and are given off from the body in the form of discharges that are peculiar to the organ or tissue in which the lesion is located, e. g., from the lungs as sputum, from scrofulous glands and white swelling as pus, and from the intestines in the feces. All these discharges are capable of starting the disease in the healthy, whether by being taken into the stomach, inhaled in the lungs, or by the inoculation of open superficial cuts and wounds.

Predisposing Causes.

Approximately ten per cent of all cases of tuberculosis occurring in children have resulted from the ingestion of milk or meat from tuberculous animals. Tuberculosis is not inherited as was formerly supposed. It is *always* acquired through infection from some other case by the transmission of the tubercle bacillus either directly or indirectly. Because it is a germ disease it is preventable and curable, not unavoidable and fatal as until recently it has been regarded. All people are not equally susceptible to the disease. Those who are in a weakened physical condition, or who lack proper and sufficient food, or who are addicted to the use of alcohol, or who have suffered from grippe, colds, measles, typhoid, pleurisy, etc., or who take insufficient rest, or exercise too

little in the open air, or sleep in close rooms, or work in a moist, dark or d sty atmosphere, are predisposed to the disease.

While tuberculosis is not essentially a disease of the poor and destitute, it is with this class of people that it is most prevalent.

Commonest Early Symptoms.

The commonest early symptoms of the disease are persistent cough or cold lasting a month or longer, hoarseness, loss of weight and appetite, run-down feeling, slight fever in the afternoons, night sweats, spitting of blood or streaks of blood in the sputum. Any one, or any combination of these symptoms, should lead one to suspect tuberculosis, and he should consult a physician immediately. If the physician can not find a cause for these symptoms, in nine cases out of ten they should be attributed to tuberculosis. It is most important that the disease be recognized early so that timely treatment may be begun. Most cases of tuberculosis that have been diagnosed in the incipient or very early stage, under modern methods of treatment, are cured.

Tuberculosis in Children.

Tuberculosis is a house disease, a disease of the home. It runs in families, not because inherited, but because of home association. It is probable that most infections occur in childhood, though the disease may not develop to the point of recognition until late in life. It is acquired by children through kissing, caressing, use of common eating utensils, and from playing on an infected floor. A consumptive in the family may be the means of transmitting the disease not only through spitting, but by coughing, sneezing, and even by speaking into the face of another.

How Tuberculosis May Be Prevented.

The sputum which a consumptive raises should be received in a cuspidor containing an antiseptic solution, or he should cough or spit into a napkin or on to a paper held before his face, and these should then be thoroughly disinfected or burned. The prevention and treatment of tuberculosis rest upon the principles that have been set forth above. They are:

1. Early and frequent examination in suspected cases and of all individuals of a family in which tuberculosis is known to exist or to have existed.

2. The control and destruction of all tuberculous discharges.

3. Living and sleeping in the open air as much as possible.

4. No tuberculous patient should sleep in the bed or even in the room with an unaffected person.

5. Proper food in sufficient quantity.

6. Plenty of sleep.

7. Absolute rest in bed when the temperature is over 99 degrees, or the pulse is over 100.

These conditions are best obtained in the early stages of tuberculosis in a sanatorium, in the advanced stages in a hospital. All treatment of tuberculosis should be under the direction of a physician, whether at home or in an institution. All patent medicines and alcohol must be avoided.

An important adjunct to the treatment at home of incipient tuberculosis in children is the open-air school; in adults, the day camp or the night camp.

What is Being Done to Prevent Tuberculosis.

In its broader aspects the campaign against tuberculosis includes popular and systematic school education and social or visiting nursing. Under popular education are included free lectures, exhibits, whether local or traveling, moving picture plays, lantern demonstrations, special popular educational literature in the form of circulars or magazine articles, and newspaper publicity and visiting nursing. Under systematic school education may be included lectures, natural science lessons, recitations, the organization of Red Cross Seal selling campaigns, and the employment of school nurses and the medical inspection of school children. This systematic educational work should be graded in adaptation to the age and maturity of the pupil, and should be illustrated and demonstrated in the various ways employed in the teaching of natural science, so far as possible.

The general movement against tuberculosis includes also the securing of proper state and municipal legislation, as well as co-operation with all

movements for the betterment of living and working conditions.

How You Can Help.

1. Teachers.—By instructing pupils as to the nature, prevention and care of tuberculosis; teaching children simple rules of health, how to breathe deeply, etc.; keeping the classroom well ventilated, and by insisting upon the medical inspection of school children.

2. Parents.—By keeping the home clean and well ventilated; teaching children to sleep with windows open, to eat proper and nourishing food, to observe the laws of health, to keep the teeth clean and in repair.

3. Children.—By keeping clean; by not putting anything into your mouths except food; by staying as much as possible in the fresh air and sunshine; by eating only wholesome and nourishing food; by always washing the hands before eating.

4. Everyone.—By taking care of your own health; by stopping indiscriminate spitting; by joining in the movement to stamp out tuberculosis; by buying and otherwise promoting the use of the Red Cross Christmas Seal; by insisting upon the employment of county-paid tuberculosis visiting nurses; by promoting the organization of a county or district tuberculosis hospital in your community.

Here Are Some of the Things That Must be Done.

1. Every city and village must have an ordinance, and enforce it, forbidding spitting in public places or in public vehicles.

2. When a case of tuberculosis is found in a family, other members must be examined to learn if they be infected.

3. Every city and county must have a well organized health department and a tuberculosis visiting nurse.

4. All living cases of tuberculosis must be reported to the State Board of Health.

5. Every living case of tuberculosis must be sent to a hospital, to the State sanatorium, or must be under proper care at home.

6. Every county must have a tuberculosis hospital for advanced cases.

OPHTHALMIA NEONATORUM.

A Big Name for an Easily Preventable Disease.

Do you know what ophthalmia neonatorum means? It is the scientific name for baby's sore eyes. It means a pus discharge from the eyes and lids of little new-born babies. It means that the baby's eyes have been infected at the time of birth or soon afterward. There are over one hundred thousand blind people in the United States today, over ten thousand of them have been made blind by this disease. Enough people are made blind by this disease alone every few years to populate a fair sized city, because of the carelessness or neglect of some one in caring for the little new-born babies. Doctors have been trying for years to stop this unnecessary blindness by educating nurses to recognize it in its beginning and by getting laws passed which require midwives, nurses and others to report at once, anything wrong with the little one's eyes or lids, so that proper treatment may be given before it is too late. But so far the public is not sufficiently educated to appreciate the importance of preventing this dreadful disease, nor the danger of the neglect of these cases. There are still many such cases occurring every day in which life-long blindness follows for want of precautions on the part of parent, midwife or nurse, or some one else who has charge of the little baby. It is an

awful responsibility when through such carelessness or neglect, a baby is allowed to become blind for life. This disease progresses rapidly when once contracted. Some doctors make it a rule to have every baby's eyes cleansed carefully immediately after birth and preventive methods used, to destroy any possible infection that may have entered during birth. But doctors are not always present, and it is for this reason it is necessary that every parent, every midwife, every nurse, or whoever has charge of a new-born baby should report to the health officer, any trouble with a new-born baby's eyes, for on prompt action may depend whether the baby must be blind through life or not.

AIR LINES.

The cold snap is more of a "snap" for the undertaker than it is for the life insurance companies.

* * *

The best way to avoid doing business with an undertaker nowadays is to ventilate.

* * *

Ventilate now, if never before. Pneumonia and tuberculosis are diseases chiefly of improper house conditions—of impure house air.

* * *

Pure air is your best protection against diseases of the respiratory organs.

* * *

Ventilate! you lobster! Ventilate!



The Health Bulletin

Published by THE NORTH CAROLINA STATE BOARD OF HEALTH

This Bulletin will be sent free to any citizen of the State upon request.

Published monthly at the office of the Secretary of the Board, Raleigh, N. C.
Entered as second-class matter at Postoffice at Raleigh, N. C., under Act of July 16, 1894.

Vol. XXVIII.

FEBRUARY, 1914.

No. II.

HEALTH

"Health is a state of physical, mental and moral equilibrium, a normal functioning of body, mind and soul. It is the state when work is a pleasure, when the world looks good and beautiful, and the battle of life seems worth while. Health is the antithesis of disease, degeneration and crime.

"The laws of health are as inexorable as the law of gravitation, as exacting as eternal justice, as relentless as fate, and their violation is the beginning and cause of all disease, suffering and sin.

"Health is the most desired of earthly blessings. When finally lost it cannot be purchased by uncounted millions, restored by the alienist, or returned by the pulpit.

"Health is that state of happiness, faith and love whose prototype was the first man—Adam; whose ideal is the CHRIST."—S. J. Crumbine, M.D., Topeka, Kan.

WILMINGTON, DEL.

LIFE IS WORTH LIVING IN NORTH CAROLINA

BUREAU OF EDUCATION
DEPT. OF THE INTERIOR

MR. S. B. WEEKS,

CONTENTS

THE GIST OF IT	213
COUNTY HEALTH OFFICERS	214
A NEW AWAKENING	215
LET PATENT MEDICINES ALONE	216
UNCLE WALT ON THE EARLY FLY	216
THE DOCTOR'S DREAM	217
THE EDUCATIONAL VALUE OF A MEDICAL SOCIETY	222
WHO'S YOUR REGISTRAR?	224
CARTOON	245

FREE PUBLIC HEALTH LITERATURE

The State Board of Health has a limited quantity of health literature on the subjects listed below, which will be sent out, free of charge, to any citizen of the State as long as the supply lasts. If you care for any of this literature, or want some sent to a friend, just write to the State Board of Health, at Raleigh. A post card will bring it by return mail.

- | | |
|--|--|
| No. 9. Medical Inspection of Schools and School Children. | No. 25. Typhoid Fever Leaflet. |
| No. 10. Care and Feeding of Babies. | No. 27. The Whole Time County Health Officer. |
| No. 11. The Plague of Flies and Mosquitoes. | No. 28. Typhoid Fever. |
| No. 12. Residential Sewage Disposal Plants. | No. 29. Rules and Regulations for County Boards of Health. |
| No. 13. Sanitary Privy. | No. 30. Measles. |
| No. 14. Hookworm Disease. | No. 31. Whooping Cough. |
| No. 15. Malaria. | No. 32. Diphtheria. |
| No. 18. Tuberculosis Leaflet. | No. 33. Scarlet Fever. |
| No. 19. Compilation of Public Health Laws of North Carolina. | No. 35. Some Light on Typhoid. |
| No. 20. Tuberculosis Bulletin. | No. 36. County Health Work on an Efficient Basis. |
| No. 21. Fly Leaflet. | Anti-Spitting Placards (11 inches by 9 inches). |
| No. 22. Baby Leaflet. | Anti-Fly Placards (11 inches by 19 inches). |
| No. 23. The Vital Statistics Law. | |

THE Health Bulletin

PUBLISHED BY THE NORTH CAROLINA STATE BOARD OF HEALTH

Vol. XXVIII.

FEBRUARY, 1914.

No. II.

THE GIST OF IT

It costs less per year to raise a baby than to bury it.

Better be a fresh air crank than a canned air corpse.

Sudden changes in the weather should be met by sudden changes in clothing.

It is folly to follow the fashions or the almanac as an index when to change from light to heavy clothing.

Public health is purchasable. With in natural limitations, a community can determine its own death rate.

You can not consistently pray, "Thy kingdom come on earth," with a fly-breeding place in your back yard.

A little attention to the quality of the air you breathe for the next month or two is likely to save you a lot of trouble.

This is the height of the smallpox season. If you go about unvaccinated, you do so at your own risk, and if you contract smallpox you have no one to blame but yourself. If you are vaccinated you can give smallpox the laugh. You need be no more afraid of smallpox than you are of a Mexican invasion. If you have been vaccinated within the last five years, you can nurse a smallpox patient without any more danger of contracting the disease than in nursing a case of toothache.

The permanent foundation for the general prosperity of the State must, in its final analysis, rest on the general health of the people.

The sleeping porch is not only a matter of comfort in the summer, but it is fast getting to be a necessity all the year round.

The Chicago Department of Health has inaugurated an excellent plan of inspecting the ventilating system of their moving picture and other theaters. If the ventilating system is found satisfactory, a certificate for good ventilation is granted, which is displayed at the ticket window.

This is an excellent idea. It puts a premium on good ventilation and discounts the "canned air" house. Why not extend it to all places of public meeting including churches and schools?

Until your local health department or the state health authorities can inspect theaters and public halls, remember that unventilated theaters and halls are little more than incubators of disease. If the air seems "close" when you enter such a place, or if the outside air "smells fresh and good" when you come out, consider yourself lucky if you don't contract that other fellow's cold or grippe. Pneumonia, consumption and other diseases spread in just such places, too.

COUNTY HEALTH OFFICERS

What They Are Doing, According to Their Own Reports

Like all Gaul, the monthly reports of the physicians employed by the various counties can, for the purpose of comparison, be conveniently divided into three parts:

I. REPORTS FROM COUNTY PHYSICIANS.

Under the recently amended health laws it is no longer required of the county physicians to mail to the State Board of Health reports covering their activities, as they are entirely in the realm of curative medicine—visiting county dependents—and a record of such work is of no value to a department whose activities are devoted entirely to preventive medicine.

II. REPORTS NOT SUBJECT TO CHECK.

Certain reports from the whole-time health officers are vague, indefinite, and not subject to check. As an illustration of this, we have reports stating that "many children have been examined"; "many defects found"; and that "there is a great deal of typhoid in our county." Other reports give the number of schools visited and the number of children examined, but omit the names and addresses of the principals of such schools and the names and addresses of the children examined. Such reports as these are not only vague and indefinite, but inasmuch as it is absolutely impossible to check them, they are utterly worthless.

III IDEAL REPORTS.

Buncombe Report.

As an example the accompanying cut is used. This cut is a reproduction of the report of Dr. Sevier, the Whole-Time County Health Officer of Buncombe. The report covers his activities during the first month of office. It will be seen that during the last eight days of this month Dr. Sevier

visited nine rural schools and lectured on sanitation and hygiene at each of them. The total enrollment is 539; the number examined is 279. Each pupil received a careful physical examination, as well as an examination of the special organs, such as the nose, throat, eyes and ears. Of the 279 children examined, he found 112 children, or a fraction more than 48 per cent, to be defective; or, in other words, to need medical attention so that they might develop into healthy and happy men and women, not physically handicapped in the struggle for life, health, happiness and usefulness. The 112 children who proved to be defective were so from the following causes: Forty-four had astigmatism (near sightedness); eleven had defective hearing as a result of adenoid; and diseased tonsils; thirty-eight had teeth that were so defective as to seriously affect their health; thirty-six had enlarged tonsils, producing a susceptibility not only to diphtheria, but to other contagious diseases common to childhood; thirty-one had adenoids; two had skin defects; three had enlarged glands of such a character as to arouse a suspicion of consumption; six children were excluded from school on account of contagious lesions. Each child that proved to be defective was given a card upon which was printed an important message to the parents calling their attention to the nature of the defect and urging that the child be placed in the hands of a competent physician so that the defect might be remedied. This report further shows that the parents of nine of these children carried out the doctor's instructions and had the defects promptly removed during the month in which they were examined. Others have doubtless followed since.

Sampson Report.

Another example of a good report—one from Dr. George M. Cooper, Whole-

COUNTY OF BUNCOMBE

MONTH OF October 1913

NAME OF SCHOOL	LOCATION	DATE OF INSPECTION	TEACHER AND ADDRESS	LECTURE GIVEN	NUMBER ENROLLED	NUMBER EXAMINED	NUMBER WITH DEFECTS	DEFECTIVE VISION	DEFECTIVE HEARING	DEFECTIVE TEETH	DEFECTIVE TONSILS	ADENOIDS	SKIN DEFECTS	GLAUCOMULAR DEFECTS	EXCLUSION FROM SCHOOL	NUMBER DEFECTS CURED
West Chapel	Backs Creek	20	Ed W. Bradley, Blanton Mo.		116	40	20	6	5	10	7	5	0	1	0	3
Backs Creek	" "	21st	Mrs Geo. Moore		139	13	5	1	0	3	3	0	0	0	1	1
Roberson	South Turkey Creek	22nd	Miss Mattie Garrison	Mo.	57	34	13	1	0	4	9	2	0	0	2	2
Beecher	Bees Creek Mo.	27th	Miss Edith Williams	Mo.	44	37	21	10	1	7	11	6	0	0	0	0
Coles River	Upper Flat Creek	27th	Miss Orla Robinson	Stockbridge Mo.	29	25	13	5	2	4	6	2	0	0	0	0
Marion Hill	Morgan Hill Ky.	28th	John S. Edwards	" "	101	82	39	18	2	5	18	8	1	0	1	1
Sandy Hill	West of Newmont Mo.	30th	Prof. Nathan Smith	Mo.	13	11	3	0	1	0	2	2	1	1	2	2
Alderson	Newmont Mo.	30th	Prof. H. P. Mason	Stamardsville Mo.	13	13	4	2	0	0	3	1	0	1	0	0
Pine Fork	Smith of Barnard Mo.	31st	Prof. Clyde Morgan	" "	36	22	8	1	0	5	7	5	0	0	0	0
TOTAL					958	228	121	44	11	97	66	31	21	3	1	9

REMARKS:

L. E. Sewier M D
Full Time Health Officer

SAMPLE MONTHLY REPORT OF A WHOLE TIME COUNTY HEALTH OFFICER.

How would you like to have such work as this going on in your county?

Time Health Officer of Sampson, for the month of December, shows that he gave eleven lectures on public health, at various points in his county, to an aggregate audience of 1,575 people, and, further, that during that month he examined 721 rural children, finding 376 of them seriously defective in teeth, vision, or hearing, or because of adenoids or diseases of the tonsils. There were also several incipient cases of tuberculosis. Of those found defective, his report shows that fifty were treated and cured of their defects. To accomplish these results Dr. Cooper traveled 505 miles on the public roads of his county during that month.

A NEW AWAKENING

Health and Child Welfare Coming to [the Front]

Three years ago no one ever thought of asking the State Board of Health about how to raise babies. People thought then that health work consisted in pensioning off some good old soul in every town and calling him the "health officer." It was understood, of course, that this pension should be very modest, and his duties, if possible, even more modest. Sure enough, they were. About all he ever did was to tack up yellow placards around small-pox cases and condemn dead horses, hogs and cattle as "a public nuisance and a menace to health." Great health work, wasn't it! Such work looks like child's play now, compared to the real life-saving work being done by whole time county health officers.

As a matter of fact, there is at the present time a hundred times as much volunteer health work going on in the State as was done by most of the so-called "health officers." To illustrate, the writer reproduces herewith the first two letters he opened in this morning's mail. The first is from a mother in a little village that never was able to

pension off a health officer, and it is just about as well off, anyway. The letter reads as follows:

State Board of Health, Raleigh, N. C.

GENTLEMEN:—Please send me some literature, about a half dozen copies, to distribute to some poor, ignorant mothers on the care and feeding of babies from birth to two years of age.

Very truly yours,

Mrs. J. P. P——

The next letter was from a very busy physician. His letter is brief and to the point, but he still has time to do more than deal out pills and render bills. His letter, with the names slightly changed, is as follows:

State Board of Health, Raleigh, N. C.

GENTLEMEN:—Please send Miss Hattie Roberts, of Doesville, your literature on tuberculosis.

Sincerely,

C. L——

These are not special or selected letters, but they represent the general run of requests for literature and information on public health and sanitation. Three years ago not as many such requests were received by the State Board of Health in a month as are now received daily.

All this represents the dawn of the health age and a special movement in the direction of child welfare. Children are beginning to come into their own. It certainly argues well for a state when we begin paying more attention to the health and well-being of our babies, when we are taking our children out of factories and when we give them longer school terms. Remember, these little children will be the citizens of North Carolina in the future, and the greatness of a state is no greater than that of her citizens.

Let the good work go on. Where you know of a case of tuberculosis ask the State Board of Health to send a bulletin on tuberculosis; where you know of a baby whose mother might profit by receiving free literature on

the care and feeding of babies send a postcard to the Board and the desired literature will go forward.

LET PATENT MEDICINES ALONE

1. There may be any one of a hundred things the matter with you. You can't tell which trouble you have.

2. There are a hundred different concoctions advertised. You can't tell which one you need. This again is guess work—mere guess work when life and health are in the balance.

3. In either case, if you guess wrong, positive injury is done; for any medicine strong enough to do good work when needed will do harm when not needed.

4. A remedy useful in one stage of a disease may be positively injurious at some other stage of that disease. With the patent medicine there is no discrimination.

5. Because you get well after using a certain preparation is no reason you get well because of it. When you are sick there are fifty chances to one that you will get well anyhow, and if you take a patent medicine, the chances are that you recover in spite of taking it, and not because of taking it.

6. The recuperative powers in the body—the natural tendency to throw off disease, readjust our physical machinery, and get things back in good order—these are your greatest helps in getting well again, and a drug which is not needed by your system hinders and checks these recuperative powers—and if you use patent medicine, there are a hundred chances to one that you will get a drug that is not needed for your particular malady and your particular stage of that malady.

7. Right living will make it unnecessary to drug yourself except at very rare intervals, but if you do get sick enough to really need treatment, better

try a negro conjure doctor than take a concoction of drugs prepared by a man who probably has no medical training, has never seen you, knows nothing of your case, and whose mixture has ninety-nine chances of missing you to one of hitting. The negro conjure doctor will at least do you no harm; the patent medicine almost certainly will.—*Progressive Farmer*.

UNCLE WALT ON THE EARLY FLY

The early fly's the one to swat. It comes before the weather's hot, and sits around and files its legs, and lays at least ten million eggs, and every egg will bring a fly to drive us crazy by and by. Oh, every fly that skips our swatters will have five million sons and daughters, and countless first and second cousins, and aunts and uncles, scores of dozens, and fifty-seven billion nieces; so knock the blamed thing all to pieces. And every niece and every aunt—unless we swat them so they can't—will lay enough dodgasted eggs to fill up ten five-gallon kegs, and all these eggs, ere summer hies, will bring forth twenty trillion flies. And thus it goes, an endless chain, so all our swatting is in vain unless we do that swatting soon, in Maytime and in early June. So, men and brothers, let us rise, gird up our loins and swat the flies! And sisters, leave your cozy bowers where you have wasted golden hours; with ardor in your souls and eyes, roll up your sleeves and swat the flies!—*Walt Mason*.

An average of six months' treatment will cure four-fifths of the early cases of tuberculosis. That costs only \$180 at the State Sanatorium for the Treatment of Tuberculosis. Statistics show that the value of the average person cured of tuberculosis is \$7,000. A pretty good investment, is it not?

THE DOCTOR'S DREAM

A Graphic Picture of a Doctor's Duties As They Are and As They Should Be

By DR. VICTOR C. VAUGHAN, President American Medical Association, Ann Arbor, Mich.

THE DREAMER.

Dr. Smith is a practitioner in one of the large cities of the Middle West. He is a man of good training, a classical graduate, took his professional course in one of our best schools, and did hospital service both at home and abroad. He is a general practitioner and keeps well posted in all that he does. He makes no claim to universal knowledge or skill, but is conscientious in all his work, and when he meets with a case needing the service of a specialist he does not hesitate to call in the best help. He has made a good living, demands fair fees from those who are able to pay, and gives much gratuitous service to the poor. He is beloved by his patients, held in high esteem by his confrères, and is respected by all who know him. He is a keen observer, reads character for the most part correctly, and is not easily imposed upon. While he recognizes the value of his services, he is not in the practice of medicine with the expectation of getting rich, and his interests are largely human and scientific. He has deep sympathy for those whose ignorance leads them to sin against their own bodies, but he is devoid of weak sentimentality and does not hesitate to admonish and even denounce the misdeeds of his patients whatever their social position. During twenty years of practice in the same locality he has become acquainted with the vices and virtues of many families.

He is not looking for the coming of

the millenium, but he is often impatient of the slow pace with which the race moves toward physical, mental and moral betterment. One of his patrons is a large manufacturer employing many unskilled laborers. Dr. Smith has often pointed out to this man that the efficiency of his working force would be multiplied many times were the men paid better wages, the work done in rooms better lighted and ventilated, and in general with a little more humaneness shown them. Another is at the head of a big mercantile house which employs clerks at the lowest possible wages and makes the conditions of life well nigh unendurable. A wealthy woman gives largely to church and charity from her revenues, which come from the rental of houses in the red light district. Another of the doctor's patrons is a grocer who sells "egg substitutes" and similar products "all guaranteed under the pure food law."

We will not continue the list of the doctor's patrons, and it must not be inferred that all are bad, for this is not true. The majority are honest, conscientious, people as is the case in all communities. Our country has a population of nearly one hundred millions. Millions of these are decent, respectable citizens, not altogether wise, but for the most part well intentioned. Thousands are brutal in their instincts, criminal in their pursuits, and breeders of their kind. We claim to be civilized, but there are those among us who would be stoned to death were

they to attempt to live in a tribe of savages.

THE DAY BEFORE THE DREAM.

But I must stop these parenthetical excursions and get back to Dr. Smith and his dream. On a certain day in November of the present year he had been unusually busy, even for one whose working hours frequently double the legal limit. During his office hours he had seen several cases which gave him grave concern. There was William Thompson, the son of his old classmate and college chum, now Judge Thompson. William finished at the old University and is now an embryo lawyer promising to follow in the footsteps of his honored and honorable father, but William belonged to a fast fraternity at college and came to Dr. Smith this morning with copper-colored spots over his body and a local sore. The doctor easily diagnosed the case and pointed out to William that he was a walking culture flask of spirochetes, a constant source of danger to all who should come in contact with him, and that years of treatment would be necessary to render him sound again. On the lip of a girl, the daughter of another old friend, the doctor had found a chancre caused by a kiss from her fiancé, a supposedly upright man prominent in church and social circles. He had seen a case of gonorrhea in a girl baby contracted from her mother, the wife of a laboring man. A case of gonorrheal ophthalmia in a young man, whose only sin was that he had used the same towel used by an older brother, next demanded his attention. Several cases of advanced tuberculosis among those who had been told by less conscientious physicians that the cough was only a bronchial trouble made Dr. Smith lament the standard of skill and honor among some of his professional brethren. Rapid loss in weight in an

old friend who had been too busy to consult him earlier was diagnosed as neglected diabetes. In another instance dimness of vision and frequent headaches persisting for months had not sufficed to send an active business man to the physician. This proved to be an advanced case of Bright's disease, which should have been recognized two years earlier. Urinary, ophthalmoscopic and blood pressure tests demonstrated the seriousness of the present condition. A breast tumor on the wife of an old and respected friend showed extensive involvement of the axillary glands and the operation demanded promised only temporary relief, while had it been done months before, complete removal of the diseased tissue would have resulted.

In making his calls for the day Dr. Smith had experienced both among the well-to-do and the poor many things which had brought within the range of his vision more and darker clouds than those which floated in the dull November sky. More than a year before he had become estranged from the family of one of his oldest and best friends. The breaking of this relationship, which had continued from his earliest professional service and had been filled with the common joys and sorrows shared only by the family physician and those under his charge, had cast a deep shadow over the doctor's life. He had officiated at the birth of each of his friend's five children, and he felt a parental love and pride in them as he saw them grow into healthy womanhood and manhood. A little more than a year ago he learned that the eldest of these children, a beautiful and healthy girl of eighteen, was engaged to a young man whom he knew to be a rake. In a spirit of altruism he had gone to the father and mother, and protested against the sacrifice of the daughter. This kindly intended intervention was

met with a stormy rebuff, and the doctor was rudely dismissed from his friend's house. But when the young woman, whose life with her unfaithful husband had made her deeply regret her fatal infatuation, felt the first pains of childbirth, she begged of her parents that her old friend might be sent for, and that morning he had delivered her of a syphilitic child. How unlike the previous births at which he had officiated in this friend's house! It had been the custom to have the doctor at every birthday dinner given the five children, and one of the boys bore his name. There would be no birthdays for this, the first grandchild, and what could the future promise the young mother? Surely, the November day was overcast with clouds for Dr. Smith before its gray light awoke the slumbering city. As he walked the few short blocks from his friend's to his own home, he cried in deepest sorrow how many thousands of daughters must be sacrificed before their parents will permit them to walk in the light of knowledge and not in the shadow of ignorance. After breakfast, which was scarcely tasted, he read in the morning paper that the announcement that "Damaged Goods" was to be given in his University town had met with such a storm of protest from the learned members of the faculty that the engagement had been cancelled. "Surely," he said, "the fetters of prudery and custom bind both the learned and the unlearned."

After his morning office hours Dr. Smith visited his patients at the city hospital. Here is a wreck from cocaine intoxication, the poison having been purchased from a drug store owned by a prominent local politician. In a padded cell is a man with delirium tremens, a patron of a gilded saloon run by another political boss. In the lying-in ward are a dozen girls seduced in as many dance halls, with

drinking alcoves. Time will relieve these girls of the products of conception, a longer time will be required to free them from the diseases which they have contracted, but all time will not wash away the stains on their lives, and what of the fatherless children to be born? Thirty beds are filled with typhoids, who under the best conditions must spend long weeks in the bondage of a fever which day by day gradually but inexorably tightens its grasp. The furred tongue, glazed eyes, flushed cheeks, bounding pulses, emaciated frames, delirious brains were all due to the fact that a large manufacturer had run a private sewer into the river above the water works. The greed and ignorance of one business firm had been permitted to endanger the lives of half a million of people.

In his family calls the doctor met with conditions equally lamentable. A fond mother in her ignorance had nursed a sore throat in one of her children with domestic remedies. The membranous patches on the tonsils, extending upward into the nasal passages and downward into the larynx, and the cyanotic face with labored breathing showed that even the magical curative action of diphtheria antitoxin, that wonderful discovery of modern medicine, would be of little avail in this individual case. The other children were treated with immunizing doses, and the doctor had the consolation of knowing that death's harvest in that household would be limited to the one whom the mother's ignorance had doomed.

The next call brought Dr. Smith to a home in which the condition was equally deplorable and still more inexcusable. One of the children some months before had been bitten by a strange cur, which soon disappeared in the alley. The wound was only a scratch and was soon forgotten. Now, the child was showing the first symp-

toms of that horrible disease, hydrophobia. But dogs must not be muzzled. Women with plumes, torn from living birds, in their hats, formed a society for the prevention of cruelty to animals and so declared.

It must not be inferred that all of Dr. Smith's experiences on that November day were sad. Men are mortal; all sickness is not preventable; accidents will happen and distressing injuries result. This world is not an Eden and no one expects that all sorrow will be banished from it. Decay and death approach with advancing years. Strength and weakness are relative terms, and those possessed of the former must help bear the burdens of those afflicted with the latter. Dr. Smith being a hard-headed, reasonable, scientific man, is no Eutopian, and he frequently meets in sick rooms experiences which greatly increase both his interest and his confidence in man. He finds the young and vigorous denying themselves many pleasures in order to brighten the pathways of the old and infirm, the fortunate lending a helping hand to the unfortunate, and the wise leading the unwise. No one, more than the family physician, can measure and appreciate the innate goodness that springs without an effort from the heart of humanity. It is difficult for the physician of large experience to unreservedly condemn anyone, and he is inclined to regard all sins as due to either heredity or environment. However, it must be admitted that on this day Dr. Smith had seen but little sunshine, and the clouds that had gathered about him had hidden the virtues and magnified the vices of his community. Especially was this true of the vice of ignorance, for ignorance which results in injury to one's fellows is not only a vice but a crime, a moral, if not a statutory one.

THE DREAM.

Late that night as the doctor sat before his grate he fell asleep, and now he is busy among his patients in a way hitherto quite unknown to him. His waiting-room is filled with people, old and young, of both sexes, who have come to be examined in order to ascertain the exact condition of their health. A young man before proposing marriage to the woman of his choice wishes a thorough examination. He wishes to know that in offering himself he is not bringing to the woman any harm. He desires to become the father of healthy children and he is not willing to transmit any serious defect to them. He tells the doctor to examine him as carefully as he would were he applying for a large amount of life insurance. The doctor goes through the most thorough physical examination and tests the secretions and blood with the utmost care. He understands his own responsibility in the matter and appreciates the high sense of honor displayed by his patient. A young woman for like reasons has delayed her final answer to the man who has asked her hand in order that the doctor might pass upon her case.

Here is the doctor's old friend, William Stone. Mr. Stone is in the early fifties. He has been a highly successful, honorable business man, has accumulated a sufficiency and enjoys the good things which his wife prepares for the table. A careful examination of the urine leads the doctor to caution Mr. Stone to reduce the carbohydrates in his food. Mr. Perkins, a lawyer who throws his whole strength in every case he tries, and of late has found himself easily irritated, shows increased urinary secretion and a blood pressure rather high. A vacation with light exercise and more rest is the preventive prescription which

he receives. Mrs. Williams, after being examined by Dr. Smith, undergoes a slight operation under local anesthesia, and is relieved of the first and only malignant cells found in her breast. Richard Roe, who is preparing for a long journey, is vaccinated against typhoid fever, a disease no longer existent in Dr. Smith's city, since pollution of the water has been discontinued. John Doe, who is a mineralogical expert and wishes to do some prospecting in high altitudes, has his heart examined.

There are numerous applicants for pulmonary examinations. This is done by Dr. Smith and his assistants in a most thorough and up-to-date manner, and advice is given each according to the findings. It has been many years since Dr. Smith has seen an advanced case of pulmonary tuberculosis, and the great white plague will soon be a thing of the past. Everybody goes to a physician twice a year and undergoes a thorough examination. The result of this examination is stated in a permanent record, and no two consecutive examinations are made by the same physician, in order that a condition overlooked by one may be detected by another. Cases of doubt or in which there is difference of opinion are referred to special boards.

The average of human life has been greatly increased and the sum of human suffering has been greatly decreased. Preventive has largely replaced curative medicine. Tenements are no longer known; prostitution, and with it the venereal diseases, has disappeared; institutions for the feeble-minded are no longer needed, because the breed has died out; insanity is rapidly decreasing, because its chief progenitors, alcoholism and syphilis, have been suppressed.

These and many other pleasing visions come to Dr. Smith in his dream, from which he is startled by

the ring of the telephone at his elbow. The call says: "Come quickly to Pat Ryan's saloon at the corner of Myrtle and Second. There has been a drunken row. Bring your surgical instruments." Then the smiles which had played over the face of the doctor in his dream were displaced by lines of care, and he went forth into the darkness of ignorance and crime.

There are many Dr. Smiths and they have been seeing pleasing visions in their dreams and meeting with stern realities in their waking hours. Nearly fifty thousand Dr. Smiths constitute the American Medical Association, which is expending thousands of dollars annually in trying to so educate the people that unnecessary disease will be prevented. The doctors are asking that the work of the national, state, municipal and rural health organizations may be made more effective, that the knowledge gained in the study of the causation of disease may be utilized. The world has seen what has been done in Havana and in the Canal Zone, how yellow fever and malaria have been suppressed, and how the most pestilential spots on earth may be converted into healthful habitations for man. Scientific medicine has made these demonstrations, and the world applauds, but seems slow to make general application of the rules of hygiene.

The unvaccinated are the dangerous people. They are the ones, and the only ones, that perpetuate this loathsome disease, that cause gullible public officials to erect "pesthouses" at public expense. And, by the way, public expense usually means at the expense of the vaccinated, for the best and most intelligent people of today are vaccinated. Only the careless, the ignorant, and particularly the negroes, are unvaccinated. To which class do you belong?

THE EDUCATIONAL VALUE OF A MEDICAL SOCIETY

Presidential Address Before the Wake County Medical Society, January 9, 1913

By HUBERT A. ROYSTER, A.B., M.D., Raleigh, N. C.

It is quite unnecessary to enter upon an argument to demonstrate the benefits to be derived from membership in a medical organization. It goes without saying that, in order to be effective in the world, each profession, trade or business must be organized and that the individual members must stand together. The medical profession is no exception to this principle. When we club together into societies, we are helping to cement closer the whole profession everywhere into a homogeneous body so that we may act as a unit on questions which concern all of us. Coöperation is a vital thing in these days and physicians particularly need it, to promote their own social and professional uplift, to secure adequate sanitary laws in their communities, and to protect themselves against impostors, delinquents and quacks. Surely none can deny that these are worthy aims and righteous prerogatives.

But these purposes, excellent as they are, do not represent all that the organized profession stands for. I most emphatically believe that the highest function of a medical society is educational. Its chief reason for existence is to make better doctors of its members. Mutual relations hold here as well. We can all teach each other something and we all learn from each other. After all, we are on earth only for this—to do our work each day as well as we can and to give humanity the advantage of our knowledge and labor. The differences between us as physicians consist not in the incomes we make, or in the number of patients we see in a day, but rather in what we know and how industriously and conscientiously we use what we know. The knowledge which we can use is the only real knowledge. All else

hangs like dust about the brain or dries up like rain drops off the stones." When we acquire knowledge it is our privilege to pass it on to others. In doing so we strengthen our own store and inspire thoughts in those who receive it. Great is the reward of the man who causes two ideas to grow where only one grew before. No man can possibly master a subject unless he either talks it or writes it. When a paper is prepared it means that the author has got hold of his subject matter and improved himself to that extent: when it is discussed the thoughts are scattered broadcast and some kernel is certain to spring up fourfold. Without debate there can be no progress; if we all agree, the wheels stand still. And this is what the medical society does—it causes us to progress in knowledge, it takes the kinks out of our thought waves, it makes for a breadth of ideas that all the reading, all the schools and all the clinical experience can never give.

The most interesting thing about a medical meeting is the feeling that we have come both to receive and to impart that which will be of service. I have sometimes wondered if we realized that the most important part of our program each month is that which relates to the actual professional work—clinical reports and the reading of papers—and that whatever else comes up is purely incidental. The framers of the by-laws for county societies over the country evidently had this in mind, for they wisely placed the scientific portion first and then arranged for the business side. In societies which have the opposite rule, I have seen the time so taken up with parliamentary proceedings and unfinished business that the appointed subject for discussion was actually

postponed to the next meeting. Debate on the fee-bill will at any time bring a large attendance, while hardly a corporal's guard may be mustered to hear a paper.

No objection can possibly be offered to the consideration of business affairs, to the question of coöperative collections or to conferences for beneficent legislation; but these matters can never be paramount. Somehow I feel that it is abhorrent to look upon our society as a trades-union or a protective association. We are not in the profession to keep somebody out or to secure laws for our own aggrandizement. We need coöperation, truly, but only with those who are striving for the same ideals as we are: we need protection, but chiefly to protect ourselves against ignorance in our own ranks. This can be done solely by teaching each other and learning from each other. The public part and the business side of the profession will take care of themselves, if we but strive every day to know more than we did the day before. And remember that in medicine, knowledge, not money, means fame; and that fame will bring fortune, if rightly directed. This is the reverse of a trade or a business, where money means fame and special knowledge counts for so little.

The value of membership in a medical society is exactly what each individual member himself sets upon it. Those who go the oftenest, pay the strictest attention and do their best work get the most out of it; while those who absent themselves, take small interest in the proceedings and never engage in them get very little out of it. I have heard men say that they got nothing out of any society meeting, that they could read it up at home, that they never saw one more dollar come to them by virtue of their membership. Such remarks make me feel sad and hopeless. I should think the social contact would appeal to

those men, if nothing else. It is a fine thing to rub elbows and swap jokes with your colleagues. We do not enjoy this as much or as often as we should. There is no reason why we should not be as hearty and well-met as men in other departments of the world's work. But we are much improved over ten years ago. The petty jealousies and unjust bickerings are fast disappearing,—are almost gone. And it is the medical society that has done it. Show me the man who never attends his local meeting and I will point out to you a man who is practically unknown to his professional brethren. He is aloof and alone. More than this, he is not keeping abreast of his profession. He is tested by his work (or lack of it) in the society. There are some doctors who are always too busy to learn how to do it better.

The surest way to show one's interest in a society is to attend its meetings regularly. Whatever else one may or may not do, being present is the essential thing. No church, lodge or club ever succeeded unless its members were enthusiastic in attendance. That is the spirit to infuse here. It would be a splendid sight to find at least two-thirds of our members in their seats at each session during the coming year. Shall not all of us take the pledge that nothing except extraordinary circumstances will keep us away from the regularly appointed hours? It will mean perhaps a sacrifice of comfort to many, a strain on the memory of some and a fancied smaller purse to others; but nothing is done without sacrifice and we may afford it once a month.

I crave your indulgence and ask your support for the program which is herewith submitted. I thank you from the bottom of my heart for the honor of presiding over your deliberations for 1913. Be assured that I feel very close to you all as brothers of the same household of faith.

WHO'S YOUR REGISTRAR?

Where and How to Register Births and Deaths

Now that the new State law requires that every birth and death be registered, a great many people want to know where to have such matters recorded, and how.

It is all very simple. There is one person, known as the Local Registrar, appointed in each incorporated town by the mayor, and in each township in the county by the chairman of the Board of county Commissioners. This local registrar is supplied with all blank forms for recording births and deaths, and reports all such records each month to the State Registrar at Raleigh.

In the case of a birth the doctor or midwife who attends the birth reports the facts to the local registrar, and a birth certificate is made out giving the date of birth, sex of the child, and other statistical particulars regarding the names and address of the parents, and so on. Where there is no doctor or midwife in attendance, the parents are required to attend to this matter.

In the case of a death the doctor fills out the medical cause of death on the death certificate furnished by the undertaker, and the undertaker se-

cures the other statistical items, such as age, date of birth, occupation, and so on, from any one competent to furnish such information. Where there is no undertaker, the person who sells the casket at retail is required to place a blank death certificate and a printed instruction sheet (both of which are furnished by the State Board of Health) in each casket. Then the person acting as undertaker is required to fill out and file the death certificate with the local registrar.

The local registrar therefore becomes a very important personage in every town and township. For this reason we give below a complete list of all local registrars in the State. Be sure to look up your own local registrar, in order to get in touch with him in case of a birth or death in the neighborhood. As every town and township in the State wants complete registration of every birth and death occurring within its borders, it is a very good idea to keep the local registrar posted about all births and deaths occurring in your neighborhood, in order that none may be omitted.

List of Local Registrars of Vital Statistics in North Carolina by Counties, Towns and Townships*

ALAMANCE COUNTY.

TOWNS.

Burlington—G. L. Amick.
Elon College—Mrs. J. N. Newman.
Graham—W. J. Nicks.
Mebane—Miss Jennie S. Lasley.

TOWNSHIPS.

Albright—Geo. F. Thompson, Graham,
No. 1.

Boon Station—Mrs. J. N. Newman,
Elon College.

Burlington—G. L. Amick, Burlington.
Coble—Green A. Nicholson, Burling-
ton, R. F. D.

Faucett—C. A. Wilson, Burlington.

Graham—W. J. Nicks, Graham.

Haw River—J. H. Blackman, Sr., Haw
River.

Melville—Miss Jennie Lasley, Mebane.
Morton—D. M. Ireland, Altamahaw.

* Every incorporated town and every township in North Carolina constitutes a registration district.

Newlin—J. M. Foust, Graham, No. 1.
 Patterson—June Hornady, Liberty.
 Pleasant Grove—J. E. Sellars, Mebane,
 No. 3.
 Thompson—Chas. A. Thompson, Swep-
 sonville.

ALEXANDER COUNTY.

TOWNS.

Taylorsville—R. K. Moose.

TOWNSHIPS.

Ellendale—G. C. Keller, Taylorsville.
 Gwaltneys—J. A. Lawrence, Hiddenite,
 No. 1.
 Little River—
 Millers—L. Dagenhart, Stony Point,
 No. 2.
 Sharpes—W. C. Lackey, Hiddenite,
 No. 1.
 Sugar Loaf—Peter Daniels, Taylors-
 ville.
 Taylorsville—R. K. Moose, Taylors-
 ville.
 Wittenberg—J. L. Hammer, Taylors-
 ville.

ALLEGHANY COUNTY.

TOWNSHIPS.

Cherry Lane—C. C. Thompson, Cherry
 Lane.
 Cranberry—S. F. Upchurch, Laurel
 Springs.
 Gap Civil—John C. Roup, Sparta.
 Glade Creek—E. C. Edwards, Eunice.
 Piney Creek—F. N. Roup, Piney Creek.
 Prather's Creek—C. M. Sanders, Strat-
 ford.
 Whitehead—W. B. Reeves, Whitehead.

ANSON COUNTY.

TOWNS.

Ansonville—Dr. O. W. Shellum.
 Lilesville—J. D. Morton.
 McFarlan—Dr. T. F. Misenheimer.
 Morven—Dr. T. F. Misenheimer.
 Peachland—S. L. Thomas.
 Polkton—W. T. Edwards.
 South Wadesboro—G. W. Huntley.
 Wadesboro—G. W. Huntley.

TOWNSHIPS.

Ansonville—Dr. O. W. Shellum, Anson-
 ville.
 Burnsville—R. H. Thomas, Marshville.
 Gullede—Dr. J. E. Hart, Wadesboro,
 No. 2.
 Lansboro—
 Lilesville—Dr. J. E. Kerr, Lilesville.

Morven—Dr. T. F. Misenheimer,
 Morven.
 Wadesboro—Dr. J. M. Covington, Jr.,
 Wadesboro.
 White Store—C. H. Rivers, White
 Store.

ASHE COUNTY.

TOWNSHIPS.

Chestnut Hill—J. E. Gamble, Crump-
 ler.
 Clifton—J. A. Jones, Clifton.
 Creston—W. J. McEwen, Creston.
 Grassy Creek—Wiley P. Colvard,
 Weaversford.
 Helton—Cleveland Francis, Helton.
 Horse Creek—Arthur Sheets, Lansing.
 Jefferson—W. E. Gentry, Jefferson.
 Laurel—Hugh Hagaman, Hemlock.
 North Fork—W. F. Lewis, Ashland.
 Obids—
 Oldfields—F. G. Ray, Baldwin.
 Peak Creek—J. C. Miller, Laurel
 Springs.
 Pine Swamp—W. H. Owens, Idlewild.
 Piney Creek—Roby Blevins, Brandon.
 Walnut Hill—A. R. Vail, Crumpler.

AVERY COUNTY.

TOWNS.

Elk Park—J. R. Patton.
 Minneapolis—C. C. Burleson.
 Newland—Harry B. Burleson.
 Montezuma—W. S. Sudesth.

TOWNSHIPS.

Altamont—A. A. Johnson, Crossnore.
 Banners Elk—T. L. Lowe, Banners
 Elk.
 Beech Mountain—S. N. Hodges, Wha-
 ley.
 Cranberry—H. T. Norman, Elk Park.
 Linville—C. C. Johnson, Crossnore.
 Roaring Creek—Robt. Burleson, Val-
 ley.
 Toe River.
 Wilsons Creek—(Colifax) Clarke, Na-
 oma.

BEAUFORT COUNTY.

TOWNS.

Bath—W. A. Tankard.
 Belhaven—J. W. Ricks.
 Chocowinity—M. G. Peele.
 Edward—Dr. O. O. Kafer.
 Pantego—J. P. Clark.
 Pinetown—F. L. Morris.
 Washington—W. C. Ayers.

TOWNSHIPS.

Bath—D. D. Harrison, Bath.
 Chocowinity—J. E. Taylor, Chocowin-
 ity.

Long Acre—J. G. Mixon, R. F. D. 4,
Washington.
Pantego—Thos. Green, Pantego.
Richland—Dr. W. T. Potter, Aurora.
Washington—W. M. Cooper, R. F. D.,
Washington.

BERTIE COUNTY.

TOWNS.

Aulander—J. Lawrence Harrington.
Colerain—Carl B. Sessoms.
Kelford—J. H. Prichard.
Lewiston—H. G. Harrington.
Roxobel—W. J. Watson.
Windsor—E. W. Gray.

TOWNSHIPS.

Colerain—C. B. Sessoms, Colerain.
Indian Woods—D. C. Outlaw, Windsor.
Merry Hill—
Mitchell—
Roxobel—
Snakebite—T. T. Speight, Windsor, R.
F. D. 1.
Whites—P. F. Cobb, Merry Hill, R. F.
D.
Woodville—H. G. Harrington, Lewis-
ton.

BLADEN COUNTY.

TOWNS.

Abbotsburg—R. K. Craven.
Bladenboro—W. W. Hester.
Councils—Dr. A. B. Holmes, Box 78.
Clarkton—Neil Singletary.
Elizabethtown—H. H. Barnhill.

TOWNSHIPS.

Abbotsburg—R. K. Craven, Abbots-
burg.
Bethel—W. F. McNeill, Dublin.
Bladenboro—W. W. Hester, Bladen-
boro.
Brown Marsh—N. M. Singletary,
Clarkton.
Carver Creek—Dr. A. B. Holmes,
Council.
Central—J. O. Ellis, Yorick.
Colby—D. A. Marshburn, Elizabeth-
town, R. F. D.
Cypress Creek—G. W. Howard, Par-
kersburg.
Elizabethtown—Hasley H. Barnhill,
Elizabethtown.
French Creek—L. R. Lyon, Kelly.
Hollow—B. C. DeVane, Tar Heel.
Turnbull—L. D. Melvin, Parkersburg,
R. F. D.
White Oak—Geo. H. Smith, White Oak.
Lake Creek—

White's Creek—I. A. Register, Rosin-
dale.

BRUNSWICK COUNTY.

TOWNS.

Bolivia—J. P. Cox.
Shallotte—L. C. Tripp.
Southport—S. P. Tharp.

TOWNSHIPS.

Lockwoods Folly—L. H. Phelps, Sup-
ply.
North West—F. M. Williams, Phoenix.
Shallotte—Dalton Edwards, Shallotte.
Smithville—S. P. Tharp, Southport.
Town Creek—R. S. McKeithan, Town
Creek.
Waccamaw—D. B. Edwards, Exum.

BUNCOMBE COUNTY.

TOWNS.

Alexander—W. R. Tillery.
Asheville—Miss L. G. Williamson.
Biltmore—Mrs. Lillian Dowtin.
Black Mountain—Guy H. Dobbin.
Jupiter—W. W. Crowder.
South Biltmore—H. V. Miller, Bilt-
more.
Weaverville—E. V. Merrill.

TOWNSHIPS.

Asheville—Miss Lula Gay Williamson,
Asheville.
Black Mountain—Guy H. Dobbin,
Black Mountain.
Every's Creek—Geo. B. Glenn, Arden.
R. F. D.
Fairview—Pinkney O. Merrell, Fair-
view.
Flat Creek—Frank Blackstock, Stock-
ville.
French Broad—James Hunter, Alexan-
der.
Ivy—Lee Arrowood, Democrat.
Leicester—J. E. Triplett, Leicester.
Limestone—Chas. O. Case, Skyland.
Lower Hominy—W. E. Fletcher, Can-
dler, R. F. D.
Reems Creek—E. V. Merrell, Weaver-
ville.
Sandy Mush—G. T. Anderson, Sandy
Mush.
Swannanoa—T. L. White, Swannanoa.
Upper Hominy—W. E. Brooks, Can-
dler.

BURKE COUNTY.

TOWNS.

Glen Alpine—L. F. Brinkley.
Hildebran—G. L. Stine.
Morganton—R. W. Pipkin.

TOWNSHIPS.

Icard—G. L. Stines, Hildebran.
 Jonas Ridge—Jake Teems, Jonas
 Ridge, R. F. D. 4.
 Linville—A. H. Giles, Fonta Flora.
 Lovelady—J. A. Perry, Rutherford
 College.
 Lower Creek—W. B. Berry, Morganton.
 Lower Fork—A. J. Wacaster, Con-
 nelly Springs, R. F. D. No. 3.
 Morganton No. 1—Jacob Williams,
 Connelly Springs, R. F. D. No. 4.
 Morganton No. 2—J. S. Mull, Morgan-
 ton, R. F. D. No. 4.
 Quaker Meadow—T. W. Drury, Mor-
 ganton, R. F. D. No. 5.
 Silver Creek—L. F. Brinkley, Glen
 Alpine.
 Smoky Creek—E. H. Tilley, Morgan-
 ton, R. F. D. No. 2.
 Upper Creek—Alphonso McGimsey,
 Table Rock.
 Upper Fork—S. L. Denton, Morganton,
 R. F. D. No. 4.

CABARRUS COUNTY.

TOWNS.

Concord—Jas. C. Fink.
 Mount Pleasant—L. S. Shirey.

TOWNSHIPS.

Baptist Church—W. H. Stallings, Har-
 risburg, No. 5.
 Bethel Church—E. P. Black, Harris-
 burg, No. 4.
 Concord—Jas. C. Fink, Concord.
 Cooks Cross Roads—J. A. Winecoff,
 Glass.
 Deweese—Mack Bradford, Concord,
 No. 2.
 Faggarts—A. H. Penninger, Concord,
 No. 4.
 Mount Gilead—M. J. Shinn, Concord,
 No. 3.
 Mount Pleasant—Oscar Walker, Con-
 cord, No. 5.
 Poplar Tent—Davis Brumby, Concord,
 No. 1.
 Reed Misenheimers—J. H. Moose, Gold
 Hill.
 Rocky River—C. L. Sims, Harrisburg.
 Smith—R. F. Widenhouse, Mt. Pleas-
 ant, R. No. 1.

CALDWELL COUNTY.

TOWNS.

Granite Falls—Dr. J. O. Deal.
 Lenoir—A. A. Kent.
 Mortimer—
 Patterson—J. R. Parker.
 Rhodhiss—Dr. O. J. Corpening, Granite
 Falls.
 Hudson—H. E. Austin.

TOWNSHIPS.

Globe—J. L. Gragg, Globe.
 Hudson—H. E. Austin, Hudson.
 Johns River—C. P. Clark, Adako.
 Kings Creek—J. T. Parlier, Kings
 Creek.
 Lenoir—Charlie Mitchel, Lenoir.
 Little River—Rev. James Shaver, Le-
 noir, No. 2.
 Lovelady—J. O. Deal, Granite Falls.
 Lower Creek—Charlie Ballew, Lenoir,
 No. 2.
 North Catawba—W. M. Smith, Granite
 Falls, No. 2.
 Patterson—A. E. Nelson, Patterson.
 Wilson Creek—T. R. Caudill, Morti-
 mer.
 Yadkin Valley—W. W. Turnmire, Yad-
 kin Valley.

CAMDEN COUNTY.

TOWNS.

South Mills—W. R. Dozier.

TOWNSHIPS.

Court House—W. E. Whaley, Camden.
 Shiloh—J. C. Wright, Shiloh.
 South Mills—J. Logan Sawyer, Lily.

CARTERET COUNTY.

TOWNS.

Beaufort—Dr. C. S. Maxwell.
 Morehead City—B. F. Royal.
 Newport—A. L. Wilson.

TOWNSHIPS.

Beaufort—C. S. Maxwell, Beaufort.
 Hunting Quarter—W. T. Paul, Wit.
 Merrimon—C. S. Nelson, Merrimon.
 Morehead—B. F. Royal, Morehead City.
 Newport—A. L. Wilson, Newport.
 Portsmouth—
 Smyrna—D. S. George, Marshallburg.
 Straits—M. F. Willis, Straits.
 White Oak—J. W. Saunders, Ocean.
 White Oak—P. A. Koonce, Stella.

CASWELL COUNTY.

TOWNS.

Milton—W. E. Reagan.
 Yanceyville—Dr. S. A. Malloy.

TOWNSHIPS.

Anderson—J. S. Roscoe, Union Ridge.
 Dan River—Wilbur Watkins, Blanch.
 Hightowers—Dr. R. F. Warren, Pros-
 pect Hill.
 Leasburg—J. A. Stephens, Leasburg.
 Locust Hill—Dr. J. F. Badgett, Ruffin,
 No. 1.

Milton—F. P. Tucker, Milton.
 Pelham—Thos. Pierce, Pelham.
 Stoney Creek—Mrs. W. A. Maynard,
 Altamahaw.
 Yanceyville—R. L. Graves, Yancey-
 ville.

CATAWBA COUNTY.

TOWNS.

Brockford—Robt. A. Lovelace.
 Catawba—J. H. L. Coulter.
 Conover—Rev. C. O. Smith.
 Claremont—R. M. Carpenter.
 Hickory—J. W. Shuford.
 Longview—T. C. Carpenter, Hickory,
 R. F. D. No. 4.
 Maiden—G. L. Harbinson.
 Newton—J. H. McLelland.
 West Hickory—W. P. Austin.

TOWNSHIPS.

Bandy—R. P. Havner, Henry.
 Caldwell—Samuel Jones, Newton.
 Catawba—J. H. L. Coulter, Catawba.
 Clines—R. M. Carpenter, Claremont.
 Hickory—J. W. Shuford, Hickory.
 Jacob's Fork—P. R. Yoder, Newton.
 Mountain Creek—D. P. Smith, Terrell.
 Newton—J. H. McLelland, Newton.

CHATHAM COUNTY.

TOWNS.

Goldston—O. D. Barber.
 Haywood—E. E. Walden.
 Moncure—J. W. Womble.
 Pittsboro—S. D. Johnson.
 Siler City—J. B. Marley.
 Merry Oaks—T. C. Lawrence.

TOWNSHIPS.

Albright—S. P. Teague, Siler City,
 No. 1.
 Baldwin—Dr. Ben. H. Hackney, By-
 num.
 Bear Creek—Dr. W. L. McManus, Bon-
 lee.
 Cape Fear—T. C. Lawrence, Merry
 Oaks.
 Center—Dr. L. E. Farthing, Pittsboro.
 Gulf—Dr. R. W. Palmer, Gulf.
 Hadley—W. M. Lindsay, Roscoe.
 Haw River—Stephen Harmon, Mon-
 cure.
 Hickory Mountain—
 Mathews—J. B. Marley, Siler City.
 New Hope—Dr. C. G. Upchurch, Apex,
 R. F. D.
 Oakland—J. C. Williams, Moncure,
 No. 2.
 Williams—J. B. Council, Apex, R. F. D.

CHEROKEE COUNTY.

TOWNS.

Andrews—Dr. W. C. Morrow.
 Murphy—S. W. Davidson.

TOWNSHIPS.

Beaver Dam—Mrs. Lillie Dockery,
 Unaka.
 Hothouse—J. M. Moore, Guy.
 Murphy—H. B. Elliott, Murphy, No. 1.
 Notla—S. A. Hughes, Cobbs.
 Shoal Creek—J. J. Rose, Suit.
 Valley—W. B. Parker, Andrews.

CHOWAN COUNTY.

TOWNS.

North Edenton—Miss Abscilla Bunch.
 Edenton—C. T. Hollowell.

TOWNSHIPS.

Edenton—Dr. H. M. J. Cason, Eden-
 ton.
 Middle—Z. W. Evans, Cisco.
 Upper—Dr. F. A. Ward, Ryland.
 Yeopin—I. J. Morson, Edenton, No. 2.

CLAY COUNTY.

TOWNS.

Hayesville—D. B. Ketron.

TOWNSHIPS.

Brasstown—W. J. R. Anderson, Ogden.
 Hiwassee—Robert Crawford, Hayes-
 ville.
 Shooting Creek—W. H. Hogshed,
 Shooting Creek.
 Tusquitee—J. V. A. Moore, Hayesville,
 No. 1.
 Hayesville—D. B. Ketron, Hayesville.

CLEVELAND COUNTY.

TOWNS.

Grover—Dr. Geo. Oates.
 Kings Mountain—D. H. Houser.
 Lattimore—R. L. Hunt.
 Lawndale—Dr. W. T. Grigg.
 Mooresboro—E. W. Gibbs.
 Shelby—Lee B. Weathers.
 Waco—A. J. Beam.

TOWNSHIPS.

No. 1—J. A. McCraw, Gaffney, S. C.,
 No. 2.
 No. 2—W. C. Hamrick, Shelby, No. 2.
 No. 3—W. D. Earl, Earls.
 No. 4—D. H. Houser, Kings Mountain.
 No. 5—A. J. Beam, Waco.
 No. 6—Lee B. Weathers, Shelby.
 No. 7—J. B. Lattimore, Lattimore.

No. 8—S. S. Mauney, Shelby, No. 5
 No. 9—Joe G. Hoyle, Fallston.
 No. 10—L. Z. Hoffman, Cleveland
 Mills, No. 1.
 No. 11—

COLUMBUS COUNTY.

TOWNS.

Acme—T. V. Moore.
 Boardman—R. L. Fields.
 Cerro Gorda—E. A. Moffitt.
 Chadbourn—J. R. Blake.
 Clarendon—J. D. Frink.
 Evergreen—W. C. Thomas.
 Fair Bluff—J. L. Lawson.
 New Berlin—Mrs. Martha M. Apple-
 white.
 Tabor—Hartford Fowler.
 Whiteville—W. E. MacDaniel.

TOWNSHIPS.

Bogue—J. R. Pierce, Hallsboro.
 Polton—J. D. Strauss, Bolton.
 Bug Hill—C. P. Gore, Bug Hill.
 Chadbourn—J. R. Blake, Chadbourn.
 Fair Bluff—
 Lees—B. A. Marlow, Old Dock.
 Ransom—S. B. King, Armour.
 South Williams—Hartford Fowler, Ta-
 bor.
 Tatums—E. K. Brown, Chadbourn.
 Waccamaw—Miss Lou Haney, Wan-
 ish.
 Welch Creek—H. S. High, Whiteville.
 Western Prong—R. V. Owens, Clark-
 ton.
 Whiteville—R. E. Powell, Whiteville.
 Williams—J. D. Frink, Clarendon.

CRAVEN COUNTY.

TOWNS.

Bridgeton—W. R. Hopewell.
 Cove City—O. C. Eubanks.
 Dover—W. G. Rouse.
 New Bern—Dr. Walter Watson.
 Vanceboro—H. C. Butler.

TOWNSHIPS.

No. 1—H. C. Butler, Vanceboro.
 No. 2—Noah Fulcher, New Bern, R.
 F. D.
 No. 3—
 No. 5—Jno. S. Morton, N. Harlowe.
 No. 6—E. A. Armstrong, Havelock.
 No. 7—J. S. McGowan, New Bern, R.
 F. D.
 No. 8—Dr. Walter Wrtson, New Bern.
 No. 9—O. H. Weatherington, Tusca-
 rora.

CUMBERLAND COUNTY.

TOWNS.

Godwin—W. M. Pope.

Hope Mills—Jno. H. Rogers.
 Stedman—Dr. O. L. McFadyen.
 Fayetteville—C. P. Overby.

TOWNSHIPS.

Beaverdam—E. E. Fisher, Roseboro,
 No. 3.
 Black River—W. M. Pope, Godwin.
 Carvers Creek—J. E. Lucas, Lane.
 Cedar Creek—Dr. K. G. Avritt, Cedar
 Creek.
 Cross Creek—C. P. Overby, Fayette-
 ville.
 Flea Hill—W. G. Holmes, Fayetteville,
 No. 2.
 Gray's Creek—R. L. Butler, Fayette-
 ville, No. 8.
 Pearce's Mill—A. E. McLean, Fayette-
 ville, No. 7.
 Rockfish—Dr. S. S. Hutchinson, Hope
 Mills.
 Seventy-first—Joe A. Graham, Fayette-
 ville, R. No. 3.

CURRITUCK COUNTY.

TOWNSHIPS.

Atlantic—W. J. Fait, Otila.
 Crawford—L. Walker, Currituck.
 Fruitville—Dr. Maynard, Knotts
 Island.
 Moyock—Dr. F. W. Ritter, Moyock.
 Poplar Branch—Dr. W. T. Griggs, Pop-
 lar Branch.

DARE COUNTY.

TOWNS.

Manteo—James A. Evans.

TOWNSHIPS.

Chicamacomico and Kennekeet—T. P.
 Gray, Avon.
 Croaton and Stumpy Point—J. V.
 Mann, Mann's Harbor.
 East Lake—M. D. Sawyer, East Lake.
 Hatteras—B. B. Dailey, Buxton.
 Nag's Head—J. A. Evans, Manteo.
 Hatteras—Wm. L. Gaskill.

DAVIDSON COUNTY.

TOWNS.

Denton—W. W. Russell.
 Lexington—A. L. Fletcher.
 Thomasville—F. E. Sigman.
 Yadkin College—John T. Williamson.

TOWNSHIPS.

Abbott's Creek—J. B. Motsinger, Wall-
 burg.
 Alleghany—W. M. C. Surratt, Newsom.
 Arcadia—Isaac P. Fishel, Arcadia.
 Boone—R. K. Williams, Linwood, No. 1.

Conrad Hill—A. S. Miller, Thomasville, No. 3.
 Cotton Grove—D. M. Feezor, Linwood, No. 2.
 Emmons—
 Hampton—C. Spencer Davis, Clemmons.
 Healing Springs—C. G. Doby, High Rock.
 Jackson Hill—Jno. M. Glover, Jackson Hill.
 Lexington—G. E. Leonard, Lexington, No. 1.
 Midway—J. M. Nifong, Wallburg, No. 1.
 Reedy Creek—J. S. Hege, Clemmons, No. 2.
 Silver Hill—A. S. Miller, Thomasville, No. 4.
 Thomasville—S. E. Sigmon, Thomasville.
 Tyro—H. C. Fritts, Lexington, No. 3.
 Yadkin College—J. T. Williamson, Yadkin College.

DAVIE COUNTY.

TOWNS.

Mocksville—W. C. P. Etchison.

TOWNSHIPS.

Calahaln—A. A. Anderson, Calahaln.
 Clarksville—Dr. J. M. Cain, Calahaln, No. 1.
 Farmington—R. D. Griffin, Farmington.
 Fulton—
 Jerusalem—J. M. Blount, Cooleemee.
 Mocksville—W. C. P. Etchison, Mocksville.
 Shady Grove—Dr. T. T. Watkins, Advance.

DUPLIN COUNTY.

TOWNS.

Magnolia—George Edwards.
 Kenansville—Dr. J. W. Farrior.
 Rose Hill—Dr. R. L. Carr.
 Faison—Dr. B. F. Butler.
 Wallace—J. D. Southerland.
 Teachays—W. B. Rivenbark.
 Warsaw—J. B. Cox.

TOWNSHIPS.

Albertson—Jones R. Smith, Kenansville.
 Cypress Creek—Dr. J. F. Landin, Chinquelin.
 Faison—Allen Bowden, Calypso.
 Glisson—Stacey R. Chestnut, Aoin.
 Island Creek—L. N. Savage, Wallace.
 Kenansville—D. N. Brock, Kenansville.

Lime Stone—Dr. G. W. Kennedy, Bula-ville.
 Magnolia—Geo. Edwards, Magnolia.
 Rockfish—N. E. Johnson, Wallace.
 Rose Hill—Dr. R. L. Carr, Rose Hill.
 Smith—LaFayette Smith, Kenansville.
 Wolfscrape—A. H. Whitfield, Mt. Olive.
 Warsaw—Dr. J. M. Williams, Warsaw.

DURHAM COUNTY.

TOWNS.

Durham—Mrs. Ethel G. Cheatham.

TOWNSHIPS.

Carr—D. H. Stallings, Gorman, No. 1.
 Cedar Creek—A. J. Burgess, Morrisville, No. 2.
 Durham—R. T. Howerton, Durham.
 Lebanon—H. J. Pope, Durham.
 Mangum—A. R. Copley, Bahama.
 Oak Grove—W. E. Ferrell, Durham, No. 6.
 Patterson—Josiah Atkins, Durham, No. 1.

EDGECOMBE COUNTY.

TOWNS.

Pinetops—R. R. Langley.
 Princeville—J. W. Leathers.
 Rocky Mount—C. H. Harris.
 Tarboro—J. H. Jacocks, No. 1.
 Conetoe—W. J. Mayo.
 Whitakers—B. A. Strickland.

TOWNSHIPS.

No. 1—J. H. Jacocks, Tarboro.
 No. 2—Julian B. Warren, Conetoe.
 No. 3—Louis Knight, Tarboro.
 No. 4—R. C. Laurence, Speed, R. F. D.
 No. 5—
 No. 6—W. J. Wholes, Whitakers.
 No. 7—
 No. 8—W. G. Harrell, Tarboro, R. F. D.
 No. 9—J. Walter Edwards, Macclesfield.
 No. 10—R. R. Langley, Rocky Mount, R. F. D.
 No. 11—W. T. Gorham, Tarboro, No. 3.
 No. 12—E. Y. Pleasants, Rocky Mt.
 No. 13—J. D. Lancaster, Pinetops.
 No. 14—O. B. Proctor, Elm City, R. F. D.

FORSYTH COUNTY.

TOWNS.

Kernersville—J. M. Greenfield.
 Winston-Salem—Dr. V. M. Long.

TOWNSHIPS.

Vienna—C. F. Mickle, Pfafftown, No. 1.
 South Fork—A. E. Hire, Winston-Salem.

Oldtown—Joe Pratt, Winston-Salem.
Old Richmond—A. B. Hendricks, Tobaccoville.

Middle Fork—C. W. Jones, Walkerton.
Lewisville—Jas. Wagoner, Lewisville.
Clemmonsville—Frank Cook, Clemmons.

Belew Creek—R. S. Linville, Kernersville, R. No. 3.

Salem Creek—R. S. Linville, Kernersville, R. F. D. No. 3.

Broad Bay—T. A. Sparrow, Winston-Salem.

Abbott's Creek—J. H. McKaughan, Kernersville.

Kernersville—J. M. Greenfield, Kernersville.

Bethania—R. O. Butner, Bethania.

Winston—Dr. V. M. Long, Winston-Salem.

Salem Chapel—Joe F. Grubbs, Rural Hall, R. F. D. No. 1.

FRANKLIN COUNTY.

TOWNS.

Bunn—Dr. B. C. Johnson.
Franklinton—J. W. Daniel.
Louisburg—S. P. Boddie.
Youngsville—George N. Stell.

TOWNSHIPS.

Cedar Rock—S. H. Boone, Louisburg.
Cypress—B. T. Sykes, Spring Hope, No. 2.

Dunn—Dr. B. C. Johnson, Bunn.

Franklinton—B. F. Cooke, Franklinton.

Gold Mine—John H. Wood, Centerville. Harris—

Hayesville—A. A. Medlin, Manson, No. 3.

Louisburg—S. P. Boddie, Louisburg.

Sandy Creek—

Youngsville—George N. Stell, Youngsville.

GASTON COUNTY.

TOWNS.

Belmont—W. W. Davis.

Bessemer City—R. L. Martin.

Cherryville—Wm. J. Allran.

Dallas—G. V. Lohr.

Gastonia—W. Meek Adams.

Lowell—Dr. J. W. Reid.

McAdenville—J. H. Wagstaff.

Mt. Holly—W. T. Johnson.

Stanley—Dr. C. H. Pugh.

E. Kings Mountain—Dr. J. E. Anthony.

TOWNSHIPS.

Cherryville—Wm. J. Allran, Cherryville.

Crowder's Mountain—J. E. Anthony, Kings Mountain.

Gastonia—W. M. Adams, Gastonia.

River Bend—W. T. Johnson, Mt. Holly.

Dallas—G. V. Lohr, Dallas.

South Point—W. H. Stowe, Belmont.

GATES COUNTY.

TOWNS.

Gatesville—Q. H. Trotman.

TOWNSHIPS.

Gatesville—Q. H. Trotman, Gatesville.

Hall—J. R. Brown, Eure.

Haslett—J. Frank Lawrence, Drum Hill.

Holly Grove—W. T. Benton, Corapeake, No. 1.

Hunter's Mill—Edward Eason, Trotville.

Mintonsville—W. A. Ellis, Gatesville, No. 1.

Reynoldson—

GRAHAM COUNTY.

TOWNS.

Robbinsville—A. H. Eller.

TOWNSHIPS.

Chevah—A. H. Eller, Robbinsville.

Stekoah—

Yellow Creek—John H. Ditmore, Yellow Creek.

GRANVILLE COUNTY.

TOWNS.

Creedmoor—I. E. Harris.

Oxford—O. D. Wilson.

Stem—J. M. Bullock.

Stovall—Mrs. B. T. Gregory.

TOWNSHIPS.

Brassfield—William S. Bablitt, Hester, R. F. D.

Dutchville—I. E. Harris, Creedmoor.

Fishing Creek—C. R. Gordon, Oxford, No. 2.

Oak Hill—J. N. Watkins, Virgilina, Va.

Salem—A. S. Green, Oxford, No. 5.

Sassafras Fork—Mrs. Bettie Thorpe Gregory, Stovall.

Walnut Grove—Luther Russell, Berea.

Tally Ho—W. S. Gooch, Stem.

Oxford—O. D. Wilson, Oxford.

GREENE COUNTY.

TOWNS.

Hookerton—J. E. Albritton.

Snow Hill—John R. Dail.

Walstonburg—J. B. Eason.

TOWNSHIPS.

Hookerton—A. H. Johnson, Hookerton.

Olds—Frank L. Rouse, Snow Hill, R. F. D.

Bull Head—

Carrs—

Jason—

Ormond—H. C. Ormond, Snow Hill, R. F. D.
 Shine—Jesse L. Mewborne, Snow Hill, R. F. D.
 Snow Hill—Chas. H. Harper, Snow Hill.
 Speight's Bridge—Archie Darden, Stantonsburg, R. F. D.

GUILFORD COUNTY.

TOWNS.

Gibsonville—W. J. Jennings.
 Greensboro—R. M. Rees.
 High Point—Dr. D. A. Stanton.
 Stokesdale—Mrs. Dora Morgan.

TOWNSHIPS.

Bruce—J. F. Medearis, Summerfield.
 Center Grove—L. A. Walker, Summerfield, R. F. D.
 Clay—Lewis Jones, Greensboro, No. 6.
 Deep River—J. W. Ingram, Kernersville, No. 2.
 Fortress—K. H. McIntyre, Pleasant Garden.
 Friendship—Dr. A. T. Millis, Guilford College.
 Gilmer—J. M. Hendrix, Greensboro.
 Greene—Walter G. Causey, Liberty, No. 2.
 High Point—W. G. Brown, High Point.
 Jamestown—J. M. Davis, Jamestown.
 Jefferson—Jacob D. Clapp, Sedalia.
 Madison—A. J. Lambeth, Brown Summit, R. F. D.
 Monroe—M. D. Coffey, Brown Summit, No. 2.
 Morehead—V. R. Stickley, Greensboro, No. 3.
 Oak Ridge—W. M. Brookbank, Stokesdale.
 Rock Creek—W. J. Jennings, Gibsonville.
 Summer—R. C. Short, Greensboro.
 Washington—Alfred Apple, Jr., Summit, R. F. D.

HALIFAX COUNTY.

TOWNS.

Enfield—J. R. Powers.
 Halifax—Dr. O. H. McKnight.
 Hobgood—A. L. Burnett.
 Littleton—S. J. Stallings, on line between Halifax and Warren counties.
 Roanoke Rapids—R. W. Brown.
 Scotland Neck—Chas. L. Staton.
 Ringwood—Dr. B. M. Nicholson.
 Tillery—Dr. F. M. Register.
 Weldon—H. G. Rowe.
 Palmyra—T. C. Allsbrook.

TOWNSHIPS.

Brinkleyville—W. H. Hayes, Essex.
 Butterwood—A. E. Carter, Littleton, R. F. D.

Conocanary—Dr. F. M. Register, Tillery.
 Enfield—J. R. Powers, Enfield.
 Faucette—E. W. Liles, Aurelian Springs.
 Halifax—W. F. Coppedge, Halifax.
 Littleton—H. P. Robinson, Littleton.
 Palmyra—W. G. Hedgepeth, Palmyra.
 Roanoke Rapids—R. W. Brown, Roanoke Rapids.
 Roseneath—R. L. Bradley, Scotland Neck, No. 2.
 Scotland Neck—C. L. Staton, Scotland Neck.
 Weldon—H. G. Rowe, Weldon.

HARNETT COUNTY.

TOWNS.

Angier—J. B. Dupree.
 Buies Creek—N. A. Stewart.
 Coats—Dr. H. C. Roberts.
 Dunn—Dr. Chas. Highsmith.
 Lillington—L. J. Arnold.

TOWNSHIPS.

Anderson Creek—E. S. Smith, Lillington, No. 2.
 Averysboro—Dr. Chas. Highsmith, Dunn.
 Barbecue—Dr. J. H. Withers, Broadway, No. 1.
 Black River—W. H. Gregory, Angier.
 Buckhorn—Joseph Cade, Kipling.
 Duke—Dr. W. P. Holt, Duke.
 Grove—Dr. H. C. Roberts, Coats.
 Hector's Creek—O. Bradley, Kipling.
 Johnsonville—H. A. Morrison, Cameron, R. F. D.
 Dr. L. J. Arnold, Lillington.
 Neill's Creek—Dr. J. T. McKay, Buies Creek.
 Stewart's Creek—Dr. W. C. Melvin, Linden.
 Upper Little River—T. A. Harrington, Broadway, R. F. D.

HAYWOOD COUNTY.

TOWNS.

Canton—H. W. Spray.
 Clyde—Dr. S. B. Medford.
 Waynesville—J. H. Howell.
 Hazelwood—Harry Fisher.

TOWNSHIPS.

Beaverdam—H. W. Spray, Canton.
 Cattaloochee—Jarvis Palmer, Jr., Cattaloochee.
 Cecil—J. F. Justice, Sunburst.
 Clyde—Dr. S. B. Medford, Clyde.
 Crabtree—C. E. Williams, Crabtree.
 East Fork—W. W. Pless, Cruso.
 Fines Creek—Dr. W. A. Graham, Crabtree, No. 1.

Ivy Hill—H. P. Campbell, Dellwood.
 Iron Duff—J. S. Davis, Waynesville,
 No. 2.
 Jonathan's Creek—H. W. Howell,
 Waynesville, No. 2.
 Pigeon—J. E. Wilson, Canton, No. 2.
 Waynesville—J. H. Howell, Waynes-
 ville, No. 2.
 White Oak—Marshall Messer, Teague.

HENDERSON COUNTY.

TOWNS.

Hendersonville—B. F. Hood.

TOWNSHIPS.

Blue Ridge—G. W. Morrison, Hender-
 sonville, R. F. D.
 Clear Creek—Dr. W. G. Hutchinson,
 Fruitland.
 Crab Creek—R. S. Stenell, Henderson-
 ville, R. F. D.
 Edneyville—L. R. Rhodes, Henderson-
 ville.
 Edneyville—W. F. Pryor, Bear Wal-
 low.
 Green River—P. J. Hart, Zirconia, R.
 F. D.
 Hendersonville—B. F. Hood, Hender-
 sonville.
 Hooper's Creek—J. B. Russell, Fletch-
 er.
 Mills River—Fred Whitaker Horse
 Shoe, R. F. D.

HERTFORD COUNTY.

TOWNS

Murfreesboro—J. L. Wall.
 Winton—J. E. Jones.
 Ahoskie—
 Harrellsville—E. B. Holleman.
 Union—T. N. Charles, Ahoskie.

TOWNSHIPS.

Ahoskie—Mrs. A. W. Greene, Ahoskie.
 Harrellsville—Dr. J. A. Powell, Har-
 rellsville.
 Maunys Neck—J. C. Picot, Como.
 Murfreesboro—J. J. Parker, Murfrees-
 boro.
 Winton—J. E. Jones, Winton.
 St. Johns—J. M. Eley, Woodland.

HOKE COUNTY.

TOWNS

Dundarrach—Alex. McMillan.
 Raeford—W. E. Freeman.

TOWNSHIPS.

Allendale—Allen Jordan, Red Springs.

Antioch—Fred Brown, Antioch, No. 1.
 Blue Springs—J. H. Wilkes, Raeford,
 R. F. D., No. 1.
 Little River—M. P. Blue, Lobelia.
 McLaughlin—N. C. Blue, Rockfish
 Raeford—H. W. B. Whitley, Raeford,
 No. 3.
 Stonewall—Alex. McMillan, Dundar-
 rach.
 Quewhiffle—J. E. Covington, Timber-
 land, R. No. 1.

HYDE COUNTY.

TOWNS.

Swan Quarter—Wm. Watson.

TOWNSHIPS.

Currituck—Gratz Credle, Scranton.
 Fairfield—L. L. Swindell, Fairfield.
 Lake Landing—W. D. Mann, Lake
 Landing.
 Ocracoke—M. L. Piland, Ocracoke.
 Swan Quarter—William Watson, Swan
 Quarter.

IREDELL COUNTY.

TOWNS.

Statesville—Miss Anne S. Marvin.
 Mooresville—J. H. Deaton.

TOWNSHIPS.

Barringer—Sherwood Houston, Trout-
 mans, R. F. D.
 Bethany—Sarah Howard, Dunlap.
 Chambersburg—G. W. McNeely, States-
 ville, No. 1.
 Coddle Creek—James H. Deaton,
 Mooresville.
 Concord—J. Hall Scroggs, Stoney
 Point, R. F. D.
 Cool Spring—F. R. Sills, Elmwood, R.
 F. D.
 Davidson—Fulton Fisher, Mooresville,
 No. 2.
 Fallston—J. P. Collins, Statesville,
 No. 3.
 Eagle Mills—J. R. Joyner, Houston-
 ville, No. 1.
 New Hope—Byrd M. Redman, Jen-
 nings, No. 2.
 Olin—C. A. Vanstory, Olin.
 Shapesburg—C. E. Jones, Statesville,
 No. 5.
 Shiloh—E. A. Morrison, Stoney Point,
 No. 1.
 Statesville—Miss Annie Marvin States-
 ville.
 Turnersburg—Jesse Thomas, Turners-
 burg.
 Union Grove—W. P. Sharpe, Jr., Har-
 mony, No. 2.

JACKSON COUNTY.

TOWNS.

Webster—J. L. Brayles, Webster.
Sylva—
Dillsboro—J. C. Fisher.

TOWNSHIPS.

Webster—J. L. Brayles, Webster.
Sylva—Dr. D. D. Hooper, Sylva.
Scott Creek—R. G. Snider, Willetts.
Quallatown—R. L. Hyatt, Whittier.
Mountain—M. L. Coggins, Erastus.
Hamburg—John Henderson, Glenville.
Green's Creek—G. M. Green, Green's Creek.
River—P. H. Price, Tuckaseegee.
Dillsboro—T. B. Queen Dillsboro.
Callowhee—Dr. Ed. Bryson, Cullo-
wheel.
Cashier Valley—C. G. Rogers, Cashiers.
Caney Fork—W. A. Brown, Cowarts.
Canada—Elias Galloway, Wolf Moun-
tain.
Barker—W. W. Jones, Jr., Barker's
Creek.
Savannah—R. D. Cowan, Gay.

JOHNSTON COUNTY.

TOWNS.

Benson—Dr. G. E. Parker.
Clayton—John I. Barnes.
Four Oaks—J. Wm. Langdon.
Kenly—H. M. Grizzard.
Micro—Dr. M. Hinnant.
Pine Level—S. S. Montague.
Princeton—Dr. Oscar Eason.
Smithfield—J. D. Underwood.
Selma—C. G. Wiggs.

TOWNSHIPS.

Banner—Dr. G. E. Parker, Benson.
Bentonsville—Willis A. Powell, Beas-
ley, No. 2.
Beulah—Dr. J. C. Grady, Kenly.
Boon Hill—Dr. Oscar Eason, Prince-
ton.
Clayton—John I. Barnes, Clayton.
Cleveland—Dr. G. E. McLemore, Clay-
ton, R. F. D.
Elevation—J. Shepp Johnson, Benson.
Ingrams—Dr. J. H. Stanley, Four Oaks.
Micro—Dr. Milford Hinnant, Micro.
Oneals—W. G. Earps, Selma, No. 2.
Pine Level—Dr. S. S. Montague, Pine
Level.
Pleasant Grove—E. S. Coats, Angier,
R. F. D.
Smithfield—Dr. A. H. Rose, Smithfield.
Wilders—J. Barnes, Clayton R. F. D.
Wilson's Mills—C. M. Wilson, Wilson's
Mills.
Selma—

Meadow—Dr. M. L. Barefoot, Dunn, R.
F. D.

JONES COUNTY.

TOWNS.

Maysville—John Shaw.
Trenton—P. B. McDaniel.

TOWNSHIPS.

Beaver Creek—
Chinquapin—
Cypress Creek—
Trenton—D. H. Herritage, Trenton.
Tuckahoe—
White Oak—
Pollocksville—

LEE COUNTY.

TOWNS.

Sanford—W. A. Campbell.
Broadway—Dr. Leon Watson.

TOWNSHIPS.

W. Sanford—W. A. Campbell, Sanford
Pocket—Lonnie Dickens, Sanford.
Jonesboro—C. A. Hamilton, Jonesboro.
Greenwood—W. F. Edwards, Lemon
Springs.
E. Sanford—W. A. Campbell, Sanford
Deep River—G. F. Johnson, Sr., Mon-
cure, No. 1.
Deep River—J. A. Kelly, Osgood.
Cape Fear—Dr. Leon Watson. Broad-
way.

LENOIR COUNTY.

TOWNS.

Kinston—Trent Haskins.
LaGrange—John H. Rouse, LaGrange
Pink Hill—Thurman Davis.

TOWNSHIPS.

Contentnea Neck—Kinston, J. R.
Fields, No. 1.
Falling Creek—
Institute—Logan Hardy, LaGrange.
Kinston—J. T. Haskins, Kinston.
Mosely Hall—
Neuse—J. H. Albritton, Kinston, No. 4.
Pink Hill—A. G. Howard, Pink Hill.
Sand Hill—
Southwest—
Trent—Lake Smith, Seven Springs, R.
F. D.
Vance—
Woodington—Clarence Humphrey,
Kinston, No. 7.

LINCOLN COUNTY.

TOWNS.

Crouse—S. S. Spargo.
Denver—P. A. Thompson.
Lincolnton—D. A. Yoder.

TOWNSHIPS.

Lincolnton—S. W. McKee, Lincolnton.
 Catawba Springs—W. H. Lowe, Alexis
 Howard's Creek—J. F. Heafner,
 Crouse.
 Ironton—S. L. Bolinger, Lincolnton,
 No. 3.
 North Brook—Wm. Hull, Cherryville.
 No. 3.

MCDOWELL COUNTY.

TOWNS.

Marion—Thos. McGuire.
 Nebo—W. J. Bowman.
 Old Fort—F. M. Bradley.
 Nealsville—A. R. Byrd.

TOWNSHIPS.

Brockett—Jno. E. Flack, Vein Mountain.
 Crooked Creek—C. B. Noblet, Old Fort,
 No. 2.
 Dysorts-ville—C. A. Jaquins, Dysorts-ville.
 Higgins—C. B. Morgan, Rocky Pass.
 Marion—Thos. McGuire, Marion.
 Marion—Ben Conley, Hankins.
 Marion—G. B. Woody, Old Fort, No. 1.
 Marion—J. P. Padgett, Sunnyvale.
 Marion—Ben F. Corpening, Marion,
 No. 2.
 Marion—Geo. F. Conley, Marion.
 Nebo—
 Old Fort—L. W. Williams, Old Fort.
 Montford Cove—
 North Cove—C. A. McCall, North Cove.
 Broad River—Dan Davis, Red Top.
 Glenwood—Augustus Byrd, Nealsville.

MACON COUNTY.

TOWNS.

Franklin—Frank L. Bryson.
 Highland—H. L. Rideout.

TOWNSHIPS.

Burnington—Chas. T. Ray, Franklin,
 R. F. D. 3.
 Cartoogechave—L. F. Setser, Franklin,
 No. 1.
 Cowell—T. C. Bryson, Franklin.
 Ellijay—J. P. Moore, Ellijay.
 Flat—E. P. Brown, Sealy.
 Franklin—Frank L. Bryson, Franklin.
 Highlands—G. P. Wright, Highlands.
 Millshoal—T. L. Fox, Ellijay.
 Nantahala—D. D. Moore, Aquone, N. C.
 Smith's Bridge—T. H. Brabson, Frank-
 lin, No. 2.
 Sugar Fork—John H. Fulton, Gneiss.

MADISON COUNTY.

TOWNS.

Hot Springs—T. B. Ebbs.
 Marshall—N. B. Tweed.
 Mars Hill—A. H. Reese.
 Walnut—B. E. Guthrie.

TOWNSHIPS.

Big Laurel—James Leak, Revere, No.
 10.
 Big Pine Creek—Miss Attie Reese, Big
 Pine.
 Bull Creek—R. A. Edwards, Marshall,
 No. 3.
 Foster Creek—C. C. Peek, Flag Pond,
 Tenn., No. 16.
 Grape Vine—R. J. Sams, Marshall, No.
 2.
 Hot Springs—T. B. Ebbs, Hot Springs,
 No. 9.
 Little Pine Creek—James Wilson, Mar-
 shall.
 Marshall—N. B. Tweed, Marshal, No. 1.
 Mars Hill—A. H. Reece, Mars Hill.
 Meadow Fork—T. F. Stamey, Joe, No.
 13.
 Middle Fork—H. J. Jervise, Buckner.
 Sandy Mush—
 Shelton Laurel—B. T. Hensley, Car-
 men.
 Spring Creek—Jasper Ebbs, Spring
 Creek, No. 8.
 Upper Laurel—R. W. Rice, Pump, No.
 11.
 West Fork—T. L. Brown, California
 Creek on Mars Hill, No. 5.

MARTIN COUNTY.

TOWNS.

Everetts—J. W. Williams.
 Gold Point—Dr. J. E. Ward, Rober-
 sonville.
 Hamilton—Mrs. Della S. Long.
 Jamesville—J. B. Allen.
 Oak City—N. M. Worsley.
 Parmele—
 Robersonville—Dr. R. J. Nelson.
 Williamston—Dr. W. E. Warren.

TOWNSHIPS.

Bear Grass—McD. Mobley, William-
 ston, No. 1.
 Crossroads—Staton Ayers, S. Everetts.
 Goose-Nest—B. M. Worsley, Oak City.
 Griffins—J. A. Daniel, Jamesville, No. 1.
 Hamilton—Mrs. B. L. Long, Hamilton.
 Jamesville—Alexander Carey, James-
 ville.

Poplar Point—M. P. Taylor, Williamston, No. 3.
 Robersonville—Dr. J. E. Ward, Robersonville.
 Williams—J. W. Hopkins, Williamston, No. 4.
 Williamston—Dr. W. E. Warren, Williamston.

MECKLENBURG COUNTY.

TOWNS.

Charlotte—Dr. F. O. Hawley.
 Cornelius—J. B. Cashion.
 Davidson—Dr. Z. K. Justice.
 Huntersville—J. M. Knox.
 Matthews—Dr. T. N. Reid.
 Mint Hill—Dr. Ayer Whitley, Charlotte, R. F. D. 11.
 Pineville—Dr. E. Hand.

TOWNSHIPS.

Berryhill—Dr. R. Z. Query, Charlotte, R. F. D., No. 4.
 Charlotte—F. O. Hawley, Charlotte.
 Clear Creek—Dr. Ayer Whitley, Charlotte, No. 11.
 Crab Orchard—Dr. R. G. Jennings, Newell.
 Deweese—Dr. Z. K. Justice, Davidson.
 Huntersville—J. M. Knox, Huntersville.
 Lemleys—J. B. Cashion, Cornelius.
 Long Creek—Dr. W. P. Craven, Charlotte, No. 6.
 Mallard Creek—W. R. Jordan, Derita.
 Morning Star—Dr. T. N. Reid, Matthews.
 Paw Creek—Dr. L. W. Hovis, Charlotte, R. F. D., No. 6.
 Pineville—Dr. E. H. Hand, Pineville.
 Providence—T. A. Squires, Matthews, No. 17.
 Sharon—Dr. L. W. Hunter, Charlotte, No. 1.
 Steel Creek—Dr. J. L. Ranson, Pineville, R. F. D.

MITCHELL COUNTY.

TOWNS.

Bakersville—W. J. Slagle.
 Spruce Pine—Esther Mehoney.

TOWNSHIPS.

Bradshaw—I. W. Bradshaw, Relief.
 Bakersville—L. Woody, Hawk.
 Bakersville—W. J. Slagle, Bakersville.
 Fork Mountain—Wm. Edwards, Little Rock Creek.
 Grassy Creek—T. A. English, Spruce Pine.
 Harrell—W. G. Honeycutt, Ewart.

Little Rock—Will Biddix, Little Rock Creek.
 Poplar—Dr. S. J. Cooper, Poplar.
 Red Hill—J. B. Masters, Peppers.
 Snow Creek—C. C. Willis, Penland.

MONTGOMERY COUNTY.

TOWNS.

Troy—Dr. C. Daligny.
 Star—P. L. Harper.
 Candor—J. C. Currie.
 Biscoe—Dr. H. E. Bowman.
 Mt. Gilead—Geo. McAuley.

TOWNSHIPS.

Uwharrie—W. L. Thayer, Uwharrie.
 Troy—J. C. Beckwith, Troy.
 Rocky Spring—T. B. Rush, Sulphur Springs.
 Pee Dee—W. M. Matheson, Mt. Gilead, No. 2.
 Ophir—B. A. Davis, Ophir.
 Mt. Gilead—George T. McAuley, Mt. Gilead.
 Little River—R. D. Kearns, Ether.
 Eldorado—J. F. Bruton, Eldorado.
 Biscoe—R. L. Davis, Star.
 Cheeks Creek—W. H. Ussery, Pekin.

MOORE COUNTY.

TOWNS.

Aberdeen—E. A. Bowen.
 Cameron—W. M. Wooten.
 Carthage—J. V. Larkin.
 Pinebluff—Henry S. Spaulding.
 Southern Pines—W. C. Mudgett.
 Vass—W. C. Leslie.

TOWNSHIPS.

Bensalem—D. C. M. Kinnan, Eagle Springs, R. F. D.
 Carthage—J. V. Larkin, Carthage.
 Deep River—L. B. Street, Glendon.
 Greenwood—W. M. Wooten, Cameron.
 McNeill's—W. C. Leslie, Vass.
 Mineral Springs—F. W. VonCaun, West End.
 Ritters—C. H. Caviness, High Falls.
 Sand Hill—Henry S. Spaulding, Pinebluff.
 Sheffields—N. J. Carter, Hemp.

NASH COUNTY.

TOWNS.

Bailey—Dr. C. H. Brantley.
 Battleboro—Dr. G. C. Battle.
 Castalia—T. A. Mathews.
 Middlesex—Dr. E. C. Powell.
 Nashville—Dr. Jno. A. Winstead.

Rocky Mount Mills—Jno. E. Moore,
Rocky Mount, Falls Road.
Sharpsburg—G. H. Pittman.
Spring Hope—R. C. Wills.

TOWNSHIPS.

Bailey—Dr. C. H. Brantley, Bailey.
Castalia—Dr. T. A. Matthews, Castalia.
Cooper's—J. Henry Vaughan, Elm
City, No. 2.
Dry Wells—Dr. E. C. Powell, Middle-
sex.
Farrell's—W. B. Bergeson, Middlesex.
Griffin's—Dr. H. H. Whitaker, Nash-
ville, No. 3.
Jackson—Sylvester Brantley, Spring
Hope, No. 1.
Manning—R. C. Wells, Spring Hope.
Nashville—G. L. Jones, Nashville.
North Whitakers—Dr. J. C. Braswell,
Whitakers.
South Whitakers—W. P. Davis, Battle-
boro.
Oak Level—T. A. Bone, Nashville, No.
1.
Red Oak—C. D. Jones, Nashville, No. 3.
Stoney Creek—S. J. F. Ellen, Battle-
boro, R. F. D.
Rocky Mount—E. Y. Pleasant, Rocky
Mount.

NEW HANOVER COUNTY.

TOWNS.

Wilmington—Chas. T. Nesbitt.
Wrightsville Beach—C. B. Parmele,
Wilmington.

TOWNSHIPS.

Cape Fear—J. Herbert Johnson, Wil-
mington, No. 1.
Federal Point—
Harnett—C. C. Redd, Wilmington, No.
2.
Masonboro—Addison Hewlett, Wil-
mington, No. 2.
Wilmington—Dr. Charles T. Nesbitt,
Wilmington.

NORTHAMPTON COUNTY.

TOWNS.

Garysburg—R. A. Ellis.
Pendleton—J. E. Taylor.
Rich Square—R. B. Lassiter.
Pendleton—J. E. Taylor.
Jackson—George A. Moore.
Lasker—Dr. G. T. Whims.
Woodland—H. J. Purvis.

TOWNSHIPS.

Gaston—
Jackson—Geo. A. Moore, Jackson.
Kirby—Dr. P. C. Brittle, Conway.

Oconeechee—Robt. A. Ellis, Garysburg.
Pleasant Hill—T. J. Taylor, Pleasant
Hill.
Rich Square—R. B. Lassiter, Rich
Square.
Roanoke—Dr. G. T. Whims, Lasker.
Seaboard—H. C. Maddry, Seaboard.
Wiccanee—J. S. Gay, Margaretsville.

ON SLOW COUNTY.

TOWNS.

Jacksonville—J. J. Cole.
Richlands—A. Z. Jarmon.
Swansboro—F. B. Pittman.

TOWNSHIPS.

Jacksonville—E. H. Shiver, Jackson-
ville.
Richlands—A. Z. Jarmon, Richlands.
Stump Sound—Dr. L. D. Bryan,
Sneed's Ferry.
Swansboro—Dr. Daniels, Swansboro.
White Oak—Dr. Daniels, Swansboro.

ORANGE COUNTY.

TOWNS.

Chapel Hill—W. J. A. Cheek.
Hillsboro—John Sharpe.
Carrboro—Robt. Blackwood.

TOWNSHIPS.

Bingham—R. L. Smith, Chapel Hill.
No. 3.
Cedar Grove—Mrs. C. M. Hughes.
Chapel Hill—S. S. Long, Chapel Hill.
Checks—John F. McAdams, Mebane,
No. 2.
Eno—John A. McCaulay, University
Station.
Little River—C. E. Wilson, Hillsboro.
Hillsboro—J. F. Coleman.

PAMLICO COUNTY.

TOWNS.

Bayboro—
Oriental—Dr. Wm. F. Griggs.
Stonewall—Riley Ross.
Vandemere—

TOWNSHIPS.

No. 1—H. H. Barrow, Reelsboro.
No. 2—Miss Ruth Miller, Bayboro.
No. 3—Miss Ruth Miller, Bayboro.
No. 4—Geo. W. Daniels, Lowland.
No. 5—Dr. Wm. F. Griggs, Oriental.

PASQUOTANK COUNTY.

TOWNS.

Elizabeth City—Dr. C. B. Williams.

TOWNSHIPS.

Elizabeth City—Dr. Zenas Fearing,
Elizabeth City, No. 1.
Nixonton—Sam S. Knowles, Elizabeth
City, No. 1.
Providence—R. N. Morgan, Elizabeth
City, No. 3.
Salem—C. W. Wilson, Weeksville.
Mt. Hermon—Eddie Sample, Okisko.

PENDER COUNTY.

TOWNS.

Atkinson—E. A. Hover, Jr.

TOWNSHIPS.

Burgaw—A. H. Paddison, Burgaw.
Caintuck—W. C. Keith, Currie.
Caswell—Geo. J. Moore, Atkinson.
Columbia—C. D. Murphy, Atkinson.
Grady—J. F. Herring, Currie.
Holly—Luke McKay, Shaken.
Long Creek—J. E. Taylor, Rocky Point.
Rocky Point—J. B. Armstrong, Rocky
Point.
Topsail—Geo. Mallard, Hampstead.
Union—W. D. Malfars, Watha.

PERQUIMANS COUNTY.

TOWNS.

Hertford—W. C. Winslow.
Winfall—Dr. B. W. Hathaway.

TOWNSHIPS.

Belvidere—E. G. Simpson, Belvidere.
Hertford—W. C. Winslow, Hertford.
New Hope—J. Mason White, Durant's
Neck.
Parkville—Dr. B. W. Hathaway, Win-
fall, No. 1.
Bethel—Mrs. M. C. Broughton, Hert-
ford, R. F. D., 1.

PERSON COUNTY.

TOWNS.

Roxboro—Rupert E. Cheek.

TOWNSHIPS.

Allenville—W. T. White, Mill Creek.
Bushy Fork—A. P. Daniel, Hurdle
Mills.
Cunningham—Geo. L. Cunningham,
Semora.
Flat River—J. S. Noell, Timberlake.
Holloway—W. A. Moody, Bethel Hill.
Mount Tirzah—Lee Cash, Rougemont.
Olive Hill—W. A. Winstead, Roxboro.
Roxboro—R. E. Cheek, Roxboro.
Woodsdale—R. H. Bailey.

PITT COUNTY.

TOWNS.

Bethel—Mrs. L. J. Carson.
Falkland—
Farmville—W. A. Darden.
Fountain—J. T. Eason.
Greenville—
Grifton—J. A. Jarrell.
Grimesland—A. O. Clark.
Winterville—Rudolph Croom.
Ayden—Guy Tayloe.
Stokes—Dr. T. G. Basnight.
Shelmerdine—Roy Venters.

TOWNSHIPS.

Belvoir—C. A. Parker, Greenville, R.
F. D.
Bethel—Mrs. S. J. Carson, Bethel.
Carolina—T. G. Basnight, Stokes.
Chicod—A. O. Clark, Grimesland.
Contentnea—Dr. P. B. Loftin, Grifton.
Falkland—J. H. Smith, Falkland.
Contentnea—Rudolph Croom, Winter-
ville.
Farmville—W. A. Darden, Farmville.
Greenville—
Pactolus—J. P. Davenport, Pactolus.
Swift Creek—Paul Kilpatrick, Grifton,
R. F. D.
Beaver Dam—R. A. Nichols, Green-
ville, R. F. D. No. 6.

POLK COUNTY.

TOWNS.

Columbus—L. H. Cloud.
Lynn—R. A. Leonard.
Saluda—Calvin Hill.
Tryon—E. B. Cawthray.

TOWNSHIPS.

Columbus—L. H. Cloud, Columbus.
Cooper Gap—J. C. Powell, Mills
Springs, No. 1.
Green's Creek—Dr. W. T. Head, Melvin
Hill.
Saluda—Dr. E. M. Salley, Saluda.
White Oak—Dr. H. H. Edwards, Mills
Spring.
Tryon—E. B. Cawthray, Tryon.

RANDOLPH COUNTY.

TOWNS.

Archdale—W. M. Wilson.
Asheboro—P. H. Morris.
Liberty—Dr. R. D. Patterson.
Ramseur—Chas. A. Reece.
Raidleman—J. A. Ivey.
Trinity—Dr. W. L. Jackson.
Worthville—Clarence Groce.

TOWNSHIPS.

Asheboro—P. H. Morris, Asheboro.
 Back Creek—Jno. F. Jarrell, Caraway.
 Brown—L. O. Sugg, Erect.
 Coleridge—Dr. C. A. Hayworth, Coleridge.
 Cedar Grove—C. T. Luck, Seagrove, R. F. D.
 Columbia—Chas. A. Reece, Ramseur.
 Concord—Dr. C. C. Hubbard, Farmer.
 Franklinville—C. H. Julian, Franklinville.
 Grant—S. S. Cox, Brown.
 Level Cross—R. L. Causey, Randleman.
 Liberty—Dr. R. D. Patterson, Liberty.
 New Hope—T. W. Ingram, Bombay.
 New Market—R. L. White, Glenola.
 Pleasant Grove—M. A. Ward, Cheeks.
 Providence—G. W. Pugh, Millboro, R. F. D.
 Randleman—J. A. Ivey, Randleman.
 Richland—J. C. Lowdermilk, Seagrove.
 Tabernacle—Dr. R. W. Myers, Fullers.
 Trinity—Dr. W. L. Jackson, Trinity.
 Union—C. H. Lucas, Pisgah.

RICHMOND COUNTY.

TOWNS.

Ellerbee—Dr. J. M. Maness.
 Hamlet—W. H. H. Bagwell.
 Hoffman—G. C. Baldwin.
 Rockingham—Dr. A. C. Everett.

TOWNSHIPS.

Beaverdam—G. C. Baldwin, Hoffman.
 Marks Creek—Dr. John I. Fowlkes, Hamlet.
 Mineral Springs—Dr. J. M. Maness, Ellerbe, No. 2.
 Rockingham—Dr. A. C. Everitt, Rockingham.
 Steeles—Dr. W. L. Howell, Covington.
 Wolf Pit—
 Black Jack—J. F. Meacham, Ellerbe.

ROBESON COUNTY.

TOWNS.

Fairmont—S. V. Stanly.
 East Lumberton—Richard Duncan.
 Maxton—Lucius McLean.
 Pembroke—Mrs. O. L. Andrews.
 Parkton—Collier Cobb.
 Lumber Bridge—J. L. Shaw.
 Rennert—C. W. Watson.
 Red Springs—D. G. McMillan.
 Rowland—Geo. K. McNeill.
 St. Paul—Claude T. Poole.
 Lumberton—Grover T. Page.

TOWNSHIPS.

Alfordsville—Geo. Bond.
 Rock Swamp—John T. Singletary,
 Lumberton, No. 6.

Britts—A. L. Stone, Lumberton, No. 4.
 Burnt Swamp—J. L. McNeill, Buie.
 Gaddy—J. O. McArthur, Rowland.
 Howellsville—N. C. Graham, Lumberton, No. 7.
 Fairmont—C. B. Thompson, Farmont.
 Lumber Bridge—Thos. Stamps, Lumber Bridge.
 Lumberton—G. T. Page, Lumberton.
 Orrum—Dr. L. B. Ayers, Proctorsville.
 Maxton—Dr. A. B. Croom, Maxton.
 Parkton—Dr. D. S. Currie, Parkton.
 Pembroke—Dr. N. H. Andrews, Pembroke.
 Raft Swamp—H. F. Townsend, Buie.
 Red Springs—Dr. H. H. Hodgkin, Red Springs.
 Rennert—Dr. A. C. McGoogin, Rennert.
 Rowland—Dr. W. E. Evans, Rowland.
 Saddletree—J. B. Ward, Lumberton, No. 7.
 Smith's—Sandy McNeill, Wakulla.
 St. Paul—Dr. Claud Poole, St. Paul.
 Sterling's Mill—Walter Murray, Barnesville.
 Thompson—F. M. Townsend, McDonald.
 White House—Dr. W. W. Early, Marietta.
 Wishart—J. Ed Tyson, Lumberton.

ROCKINGHAM COUNTY.

TOWNS.

Leaksville—W. R. Lynch, Spray, N. C.
 Reidsville—James D. Womack.
 Madison—G. W. Martin.
 Stoneville—Jasper Claybrooks.
 Mayodan—

TOWNSHIPS.

Huntsville—Dr. W. A. Payne, Belews Creek, R. F. D.
 Leaksville—W. R. Lynch, Spray.
 Madison—Dr. J. H. Ault, Mayodan.
 Mayo—Jasper Claybrook, Stoneville.
 New Bethel—J. N. McCollum, Wentworth, R. F. D.
 Price—John W. Price, Price.
 Reidsville—Jas. D. Womack, Reidsville.
 Ruffin—Dr. C. R. Wharton, Ruffin.
 Simpsonville—Dr. W. A. Johnston, Reidsville, R. F. D.
 Williamsburg—G. T. Walker, Reidsville, R. F. D.
 Wentworth—Dr. W. W. Matthews, Wentworth.

ROWAN COUNTY.

TOWNS.

China Grove—Dr. G. A. Ramseur.
 Cleveland—R. B. Harris.

Faith—R. A. Raney.
 East Spencer—L. S. Cotter.
 Granite Quarry—A. L. Hall.
 Rockwell—H. W. Barnhardt.
 Salisbury—Dr. Charles W. Woodson.
 Spencer—John R. Cruse.
 Landis—B. O. Edwards.
 Gold Hill—J. S. Russell.

TOWNSHIPS.

Atwell—Dewitt Patterson, China Grove.
 China Grove—Dr. G. A. Ramseur, China Grove.
 Cleveland—Dr. A. B. Burns, Cleveland.
 Franklin—William Kester, Salisbury, No. 4.
 Gold Hill—J. S. Russell, Gold Hill.
 Litaker—R. A. Rainey, Salisbury, No. 3.
 Locke—John Wright, Salisbury.
 Morgan—Joseph W. Miller, Richfield.
 Mount Ulla—Dr. G. A. Brown, Mt. Ulla.
 Providence—Dr. C. M. Van Poole, Salisbury.
 Salisbury—T. W. Summerset, Salisbury.
 Scotch-Irish—Frank N. Bryan, Cleveland, No. 1.
 Steele—Jno. A. Locke, Barber.
 Unity—E. J. Roseman, Salisbury, No. 5.
 China Grove—Dr. G. A. Ramseur, China Grove.

RUTHERFORD COUNTY.

TOWNS.

Bostic—T. L. Harill.
 Ellenboro—S. H. Green.
 Forest City—H. B. Doggett.
 Rutherfordton—Z. A. Edwards.

TOWNSHIPS.

Camp Creek—Will F. Flack, Union Mills.
 Chimney Rock—John C. McDaniel, Ayer.
 Colfax—S. H. Green, Ellenboro.
 Cool Spring—Chas. K. Flack, Forest City.
 Duncan Creek—Grady Witherrow, Hollis.
 Gilkey—H. F. Killian, Gilkey.
 Golden Valley—M. G. Crow, Gamble's Store.
 Green Hill—T. J. Jones, Green Hill.
 High Shoal—Boss Green, Henrietta.
 Logan Store—Ed. Thompson, Bostic, No. 1.
 Morgan—L. D. Hemphill, Union Mills, No. 1.

Rutherfordton—Y. A. Edwards, Rutherfordton.
 Sulphur Springs—Alonzo Robbins, Forest City, No. 2.
 Union—George Moore, Rutherfordton, R. F. D.

SAMPSON COUNTY.

TOWNS.

Autryville—Jas. R. White.
 Clinton—L. S. Bell.
 Roseboro—L. M. White.
 Salemburg—Dr. G. L. Sykes.
 Turkey—W. B. McDougall.

TOWNSHIPS.

Dismal—R. L. Bennett, Cooper, No. 1.
 Franklin—J. B. Seavy, Kerr.
 Halls—D. A. Bass, Kerner.
 Herrings—S. A. Royals, Huntley.
 Honeycuts—F. D. Parker, Salemburg.
 Lisbon—Eugene Johnson, Ingold.
 Little Coharie—J. W. Underwood, Roseboro.
 McDaniels—J. R. T. Green, Parkersburg.
 Newton Grove—J. Harmon Britt, Keener, No. 1.
 North Clinton—L. S. Bell, Clinton.
 Piney Grove—J. S. Darden, Faisons.
 South Clinton—L. H. Best, Clinton.
 Taylor's Bridge—Dr. J. O. Mathews, Ingold.
 Turkey—Dr. T. G. Williams, Turkey.
 Westbrook—Kirby West, Dunn, R. F. D., No. 6.
 Mingo—S. F. Jackson, Cooper, R. F. D.

SCOTLAND COUNTY.

TOWNS.

East Laurinburg—S. J. Siler.
 Laurinburg—D. A. McDougall.

TOWNSHIPS.

Laurel Hill—
 Spring Hill—Daniel Monroe, Wagram.
 Stewartsville—S. W. Covington, Laurinburg.
 Williamson's—W. Z. Gibson, Gibson.

STANLY COUNTY.

TOWNS.

Albemarle—W. W. Talbirt.
 Big Lick—D. E. Efird.
 New London—D. E. Ridenhour.
 Norwood—W. G. Snuggs, Norwood.
 Richfield—Geo. W. Miller.

TOWNSHIPS.

Almond—John W. Fink, Albemarle, No. 3.

Big Licks—D. E. Efrid, Big Lick.
 Center—Dr. Carl Blalock, Norwood.
 Endy—J. I. Efrid, Big Lick, No. 2.
 Furr—Dock Love, Locust.
 Harris—J. O. Allen, New London.
 North Albemarle—Dr. L. V. Dunlap,
 Albemarle.
 Ridenhour—M. J. M. Misenheimer,
 Richfield, No. 11.
 South Albemarle—S. H. Hearne, Al-
 bemarle.
 Tyson—R. W. Thompson, Norwood,
 No. 2.

STOKES COUNTY.

TOWNS.

Walnut Cove—R. F. Reynolds.

TOWNSHIPS.

Beaver Island—J. Frank Dunlap,
 Gideon.
 Danbury—A. J. Fagg, Danbury.
 Meadows—J. Walter Fowler, German-
 town.
 Peters Creek—O. M. Bennett, Dan-
 bury.
 Quaker Gap—Frank S. Lynch, Pilot
 Mountain.
 Sauratown—H. G. Tuttle, Walnut
 Cove.
 Snow Creek—A. B. Carter, Sandy
 Ridge.
 Yadkin—J. Walter Tuttle, King, No. 1.
 Yadkin—Dr. Oscar R. Kiger, King.
 Yadkin—H. H. Brown, Pinnacle.

SURRY COUNTY.

TOWNS.

Dobson—Dr. W. Monroe Stone.
 Elkin—R. B. Lewis.
 Mount Airy—A. V. West.
 Pilot Mountain—J. A. Pell.

TOWNSHIPS.

Bryan—W. B. Williams, Rusk, No. 2.
 Dobson—Dr. W. M. Stone, Dobson.
 Eldora—John T. Simpson, Mt. Airy,
 No. 4.
 Elkin—Robt. S. Guyer, State Road.
 Franklin—G. E. Isaacs, Dobson, R. F.
 D. No. 1.
 Long Hill—Eddie M. Bryant, Ararat.
 Marsh—S. H. Gough, Cruchfield.
 Pilot—John M. Redman, Pilot Moun-
 tain.
 Rockford—W. R. Norman, Rockford.
 Mount Airy—E. A. Hannah, Mt. Airy.
 Shoals—John Whitaker, Pinnacle.
 Siloam—J. M. Whitaker, Siloam.
 Stewart's Creek—Logan Beame, Mount
 Airy, No. 3.
 Westfield—W. B. Blair, Pilot Moun-
 tain, No. 2.
 Marsh—H. E. Bemar, Rusk No. 1.

SWAIN COUNTY.

TOWNS.

Almond—A. L. Epps.
 Bryson—N. R. Bishop, Bryson City.
 Whittier—S. H. Justice.

TOWNSHIPS.

Charleston—N. R. Bishop, Bryson
 City.
 Forneys Creek—G. S. Welch, Bush-
 nell.
 Nantahala—A. L. Epps, Almond.
 Oconalufy—C. W. Parker, Cherokee.

TRANSYLVANIA COUNTY.

TOWNS.

Brevard—G. C. Kilpatrick.
 Rosman—W. P. Hogsed.

TOWNSHIPS.

Boyd—Dr. A. E. Lyday, Penrose.
 Brevard—G. C. Kilpatrick, Brevard.
 Cathey's Creek—C. R. Sharp, Selica.
 Dunn's Rock—A. C. Landreth, Bre-
 vard.
 Estatoe—A. M. Paxton, Rosman.
 Gloucester—Vance Galloway, Lake
 Toxaway.
 Little River—W. R. Kilpatrick, Pen-
 rose.
 Hogback—Ward Breedlove, Lake Tox-
 away.

TYRRELL COUNTY.

TOWNS.

Columbia—D. W. Alexander.

TOWNSHIPS.

Alligator—W. E. Bateman, Columbia,
 No. 2.
 Columbia—D. W. Alexander, Colum-
 bia.
 Gum Neck—Paul Jones, Gum Neck.
 Scuppernong—J. T. Alexander, Colum-
 bia, No. 1.
 South Fork—

UNION COUNTY.

TOWNS.

Indian Trail—Dr. J. Y. Fitzgerald.
 Mineral Springs—G. T. Winchester.
 Monroe—T. L. Crowell.
 Unionville—Dr. A. D. N. Whitley.
 Waxhaw—W. R. Steele.
 Wingate—J. J. Perry.
 Stout—M. D. Gurley.
 Marshville—F. W. Ashcraft.

TOWNSHIPS.

Buford—W. P. Plyler, Monroe, No. 4.
 Goose Creek—Dr. A. D. N. Whitley,
 Unionville.

Jackson—W. R. Steele, Waxhaw.
 Lane's Creek—Dr. J. B. Eubank, Monroe, No. 1.
 Marshville—F. W. Ashcraft, Marshville.
 Monroe—T. L. Crowell, Monroe.
 New Salem—G. W. Smith, Sr., Marshville, No. 5.
 Sandy Ridge—W. L. Harkey, Matthews, R. F. D.
 Vance—J. W. Roberts, Indian Trail.

VANCE COUNTY.

TOWNS.

Henderson—Dr. F. E. Perkins.
 Kittrell—C. E. Pennington, Box 14.
 Marshville—F. W. Ashcraft.
 Middleburg—Thos. H. Carroll.

TOWNSHIPS.

Dabney—E. S. Glover, Dabney.
 Henderson—P. E. Rowland, Henderson.
 Kittrell—H. A. Woodleif, Kittrell.
 Middleburg—T. H. Carroll, Middleburg.
 Sandy Creek—Joe N. Tunstall, Henderson, No. 2.
 Watkins—J. B. Glove, Henderson, No. 5.
 Nutbush—B. F. Flemming, Manson, R. F. D.
 Townsville—F. T. Tucker, Townsville.
 Williamsboro—R. A. Bullock, Dabney, No. 1.

WAKE COUNTY.

TOWNS.

Apex—R. J. Bolling.
 Bonsal—J. S. Sears.
 Cary—D. S. House.
 Fuquay Springs—E. H. Howard.
 Garner—J. D. Johnson.
 Holly Springs—J. D. Marcom.
 Morrisville—W. B. Johnson.
 New Hill—J. B. Rogan.
 Raleigh—W. T. Davis.
 Wake Forest—John H. Royall.
 Wendell—J. Ashley Wall.
 Zebulon—W. B. Griffin.
 Forestville—

TOWNSHIPS.

Barton's Creek—G. H. Ball, Neuse, No. 1.
 Buckhorn—J. B. Rogan, New Hill.
 Cary—D. H. House, Cary.
 Cedar Fork—E. M. Ellis, Morrisville.
 House Creek—T. E. Hailey, Cary, No. 1.
 Holly Springs—J. D. Marcom, Apex, No. 5.
 Leesville—A. M. Sorrell, Raleigh, No. 6.

Little River—H. P. Gill, Wakefield.
 Marks Creek—J. A. Wall, Wendell.
 Middle Creek—A. S. Ballentine, Fuquay Springs.
 Neuse—J. B. Wiggins, Neuse, No. 1.
 New Light—Nerous Watkins, Wake Forest, No. 1.
 Panther Branch—N. F. Turner, McCullers.
 Raleigh—W. T. Davis, Raleigh.
 St. Mary's—J. D. Johnson, Garner.
 St. Matthews—J. J. Horton, Knightdale, No. 2.
 Wake Forest—John H. Royall, Wake Forest.
 White Oak—R. J. Bolling, Apex.
 Swift's Creek—J. C. Smith, Raleigh, No. 4.

WARREN COUNTY.

TOWNS.

Littleton—S. J. Stallings, on line between Halifax and Warren Counties.
 Macon—A. F. Brame.
 Norlina—T. T. Hawks.
 Vaughan—W. T. Carter.
 Warrenton—R. J. Jones.

TOWNSHIPS.

Fishing Creek—M. T. Duke, Marmaduke.
 Fork—R. M. Williams, Inez.
 Judkins—J. J. Stallings, Embro.
 Wise—H. C. Colimon, Wise.
 Nutbush—A. E. Paschal, Manson.
 River—B. E. King, Littleton.
 Roanoke—J. T. Delbridge, Elams.
 Sandy Creek—S. E. Allen, Manson.
 Smith Creek—J. F. P. Horton, Norlina.
 Shocco—J. William Limer, Afton.
 Warrenton—
 Sixpound—A. F. Brame, Macon.

WASHINGTON COUNTY.

TOWNS.

Cherry—E. H. Liverman, Creswell.
 Creswell—Dr. W. H. Hardison.
 Plymouth—Thos. L. Smith.
 Roper—J. J. Hassell.

TOWNSHIPS.

Lees Mills—J. J. Hassell, Roper.
 Plymouth—W. T. Nurmey, Plymouth.
 Scuppernong—
 Skinnersville—Geo. S. Swain, Mackeys.

WATAUGA COUNTY.

TOWNS.

Boone—J. D. Council, Boone.
 Blowing Rock—Geo. F. Coffey.

TOWNSHIPS.

Bald Mountain—W. H. McGuire,
Brookside.
Beaverdam—S. C. Eggers, Vilas.
Blowing Rock—
Blue Ridge—Granville Storie, Blowing
Rock.
Boone—W. L. Trivett, Boone.
Cove Creek—Dr. W. O. Bingham,
Zionville.
Elk—G. W. Carroll, Jr., Triplett.
Laurel Creek—J. L. Glenn, Watauga
Falls.
North Fork—Riley May, Trade Tenn.
Meat Camp—M. H. Norris, Sands.
Shawneehaw—Thos. W. Rominger,
Hackett.
Stony Fork—J. M. Younce, Yuma.
Watauga—O. L. Coffey, Banner Elk,
R. F. D.

WAYNE C UNTY.

TOWNS.

Eureka—C. R. Aycock, Fremont.
Fremont—C. R. Aycock.
Goldsboro—Robert A. Creech.
Mt. Olive—E. B. Flowers.
Pikeville—A. Hosea.
Seven Springs—G. G. Quinn.

TOWNSHIPS.

Brogden—Ernest B. Flowers, Mt. Olive.
Buck Swamp—Milford Aycock, Pike-
ville.
Fork—W. C. Hollowell, Goldsboro, R.
F. D.
Goldsboro—Robt. A. Creech, Goldsboro.
Granthams—V. N. Bass, Goldsboro, R.
F. D.
Great Swamp—B. R. Edgerton, Kenly,
No. 1.
Nahunta—Clarence R. Aycock, Fre-
mont.
New Hope—L. D. Summerlin, Golds-
boro, No. 3.
Pikeville—A. Hosea, Pikeville.
Saulston—Geo. H. Smith, Saulston,
No. 1.
Indian Springs—G. G. Quinn, Seven
Springs.
Stony Creek—

WILKES COUNTY.

TOWNS.

North Wilkesboro—W. A. Bullis.
Ronda—N. E. Parlier.
Wilkesboro—B. S. Call.

TOWNSHIPS.

Antioch—John Glass, Call.
Beaver Creek—R. C. Walsh, Oakdale.
Boomer—J. E. Phillip, Boomer.

Brushy Mountain—P. A. Jennings,
Poors Knob, No. 1.
Edwards—E. W. Settle, Benham.
Elk—S. J. Barnett, Mt. Zion.
Job's Cabin—H. C. Baker, Maple
Springs.
Lewis Fork—A. L. Messick, Purlear.
Lovelace—P. M. Reid, Spurgeon.
Moravian Falls—W. G. Meadows,
Poor's Knob.
Mulberry—W. H. Sebastian, Hays.
New Castle—C. M. Wellborn, New Cas-
tle.
North Wilkesboro—J. N. Brooks, N.
Wilkesboro, No. 2.
Reddies River—G. A. Crysel, N.
Wilkesboro, No. 1.
Rock Creek—J. A. Sebastian, N.
Wilkesboro, No. 2.
Somers—J. W. Robbins, New Castle,
No. 1.
Stanton—W. E. Fletcher, Purlear.
Trap Hill—A. P. Baugus, Chuckle, R.
F. D.
Union—R. L. Parson, Wilbar.
Walnut Grove—Granville Billings,
Dockery.
Wilkesboro—T. M. Crysel, Wilkesboro.

WILSON COUNTY.

TOWNS.

Black Creek—James A. Barnes.
Elm City—Clarence Winstead.
Lucama—Dr. I. W. Lamm.
Stantonsburg—H. E. Thompson.
Wilson—

TOWNSHIPS.

Black Creek—James A. Barnes, R. F.
D.
Toisnot—Clarence Winstead, Elm City.
Stantonsburg—H. E. Thompson, Stan-
tonsburg.
Spring Hill—W. F. Watson, Lucama,
No. 1.
Saratoga—Dr. C. S. Eagles, Stantons-
burg, R. F. D.
Old Fields—R. T. Barnes, Kenly, R. F.
D.
Gardner—W. B. Forbes, Elm City, R.
F. D.
Cross Roads—J. H. Lamm, Lucama.
Taylor—
Wilson—

YADKIN COUNTY.

TOWNS.

Jonesville—W. S. Vestal.
Yadkinville—Dr. G. T. Evans.
East Bend—W. H. Norman.
Boonville—Dr. J. R. Finley.

TOWNSHIPS.

Buck Shoal—Dr. V. F. Couch, Buck Shoal.
 Boonville—Dr. J. R. Finney, Boonville.
 Little Yadkin—W. A. Jones, Lewisville.
 Liberty—Dr. G. T. Evans, Yadkinville.
 Knobs—Dr. H. C. Salmons, Jonesville.
 Forbush—Dr. J. J. Clingman, Cona.
 Fall Creek—J. W. Williams, East Bend.
 East Bend—Dr. J. T. Benbow, East Bend.
 Deep Creek—J. H. Wooten, Yadkinville.

YANCEY COUNTY.

TOWNSHIPS.

Ramsaytown—J. A. Hannum, Ramsaytown.
 Price Creek—Mrs. Bell Horton, Cane River.
 Pensacola—R. V. T. Riddle, Pensacola.
 Jacks Creek—J. W. Horton, Wilhite.
 Green Mountain—Jacob Bailey, Toledo.
 Crabtree—Nat Silver, Micaville.
 Cane River—Glen Proffitt, Bald Creek.
 Bush Creek—Alfred Green, Toecane.
 Burnsville—Dr. J. B. Gibbs, Burnsville.
 South Toe—Miss Sallie Trull, Celo.
 Egypt—Jno. King, Belog.

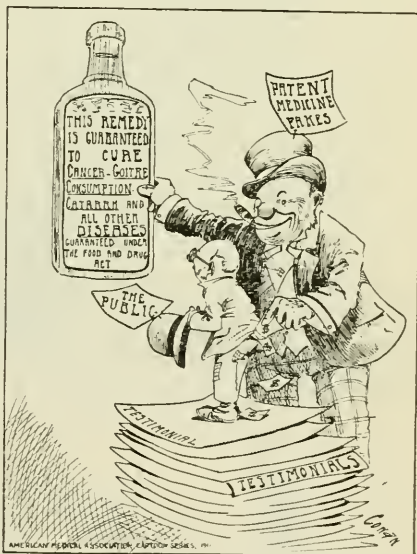
Fresh Air Crank "Agin" Oxypathors

Here is a sample of the letters received by the State Board of Health after the exposure of the Oxypathor fraud:

By all means continue sending me the Health Bulletin. I have derived much benefit from studying it. By reading it, I have become a "fresh air crank," so much so, that we even sleep with our doors open. The winter has been so mild that we have had to keep up our screens.

I am highly pleased with your stand on the alcohol and tobacco question, patent medicines, "Oxyfakors," etc. I hope you will take up the fight on coffee, tea, etc., and show us, one and all, how to live a clean life and thus avoid much sickness that we bring on ourselves, but which, to excuse ourselves, or in self-defense, we charge to our Creator.

Very truly yours,
 W. L. G. ———

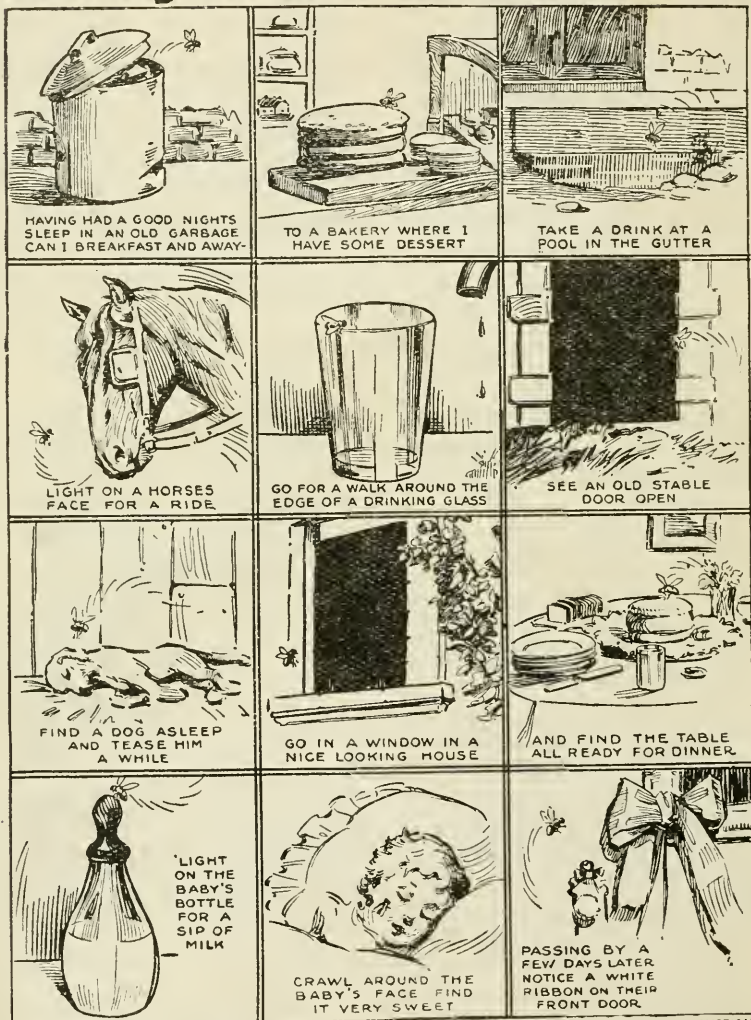


TRUE TO LIFE.

The efficiency of a Health Department may be tested or better, judged, by the death rate of the community it serves. But, of course, due allowance must always be made for lack of proper equipment of force and funds with which to work.

A noted medical authority asserts that our unclean mouths, diseased teeth and gums, are a constant and insidious menace to health; they are a source of infection in the individual and a dangerous depot for the dissemination of disease to others.

A Day in the Life of a Fly



—COFFMAN IN NEW YORK AMERICAN

WEEKS
COLLECTION



The Health Bulletin

Published by THE NORTH CAROLINA STATE BOARD OF HEALTH

This Bulletin will be sent free to any citizen of the State upon request.

Published monthly at the office of the Secretary of the Board, Raleigh, N. C.

Entered as second-class matter at Postoffice at Raleigh, N. C., Under Act of July 13, 1894.

Vol. XXVIII.

MARCH, 1914.

No 12

The Use and Abuse of Windows

Windows were made to admit light and fresh air. They were not meant to hermetically seal up people within four walls like a dungeon. The greatest trouble with four-fifths of our houses is that there are not enough windows in them, and some of us do not use the few windows we do have. Witness the two houses here shown. One house with two families living in it has but a few little windows, and they are kept shut up as



shown in the picture, practically all of the time. There is lots of fresh air around this house because the people have all the foul air shut up inside. The other house has more and larger windows and the people believe in getting their share of God's life-giving fresh air and sunlight by keeping the windows open, regardless of the snow. Don't hibernate. Ventilate.

MR. S. B. WEEKS,

DEPT. OF THE INTERIOR

BUREAU OF GEOLOGY
WASHINGTON

TABLE OF CONTENTS

THE USE AND ABUSE OF WINDOWS..	247	CITY PRIVIES	267
HEALTH BREVITIES	249	GOOD EYES PAY.....	271
GOLD BRICKS IN HEALTH.....	250	STAND UP STRAIGHT AND AVOID TU-	
GOOD HUNTING	251	BERCULOSIS	271
RESPONSIBILITY	252	INSIST ON WRAPPED BREAD.....	272
NO HELP YET FOR FAT PEOPLE.....	252	NOT EVEN ADVERTISING.....	272
HOW MUCH LIQUOR A SICK MAN		HOGS IN TOWNS.....	273
NEEDS	254	TWO MEETINGS THAT MAY INTEREST	
WOULD YOU BLAME THE LORD?.....	256	YOU	273
MAY HAVE OUR OFFICE COPY.....	257	WHERE IGNORANCE IS DEATH.....	274
WE MUST HAVE GOOD TEETH.....	258	OUR RESPECTS TO THE FLY.....	276
THE DOCTOR'S LARGER DUTY.....	260	THE TRADEMARK OF IGNORANCE....	276
THE PRACTICAL RURAL PRIVY.....	263	BLAME IT ON THE LIVER.....	277
A STUDY IN ADVERTISEMENTS.....	266	LEARN AND LIVE.....	277
CHARLEY CALLOW	266	TWO MILK ROUTES (Cartoon).....	278

FREE PUBLIC HEALTH LITERATURE

The State Board of Health has a limited quantity of health literature on the subjects listed below, which will be sent out, free of charge, to any citizen of the State as long as the supply lasts. If you care for any of this literature, or want some sent to a friend, just write to the State Board of Health, at Raleigh. A post card will bring it by return mail.

- | | |
|--|--|
| No. 9. Medical Inspection of Schools and School Children. | No. 25. Typhoid Fever Leaflet. |
| No. 10. Care and Feeding of Babies. | No. 27. The Whole Time County Health Officer. |
| No. 11. The Plague of Flies and Mosquitoes. | No. 28. Typhoid Fever. |
| No. 12. Residential Sewage Disposal Plants. | No. 29. Rules and Regulations for County Boards of Health. |
| No. 13. Sanitary Privy. | No. 30. Measles. |
| No. 14. Hookworm Disease. | No. 31. Whooping Cough. |
| No. 15. Malaria. | No. 32. Diphtheria. |
| No. 18. Tuberculosis Leaflet. | No. 33. Scarlet Fever. |
| No. 19. Compilation of Public Health Laws of North Carolina. | No. 35. Some Light on Typhoid. |
| No. 20. Tuberculosis Bulletin. | No. 36. County Health Work on an Efficient Basis. |
| No. 21. Fly Leaflet. | Anti-Spitting Placards (11 inches by 9 inches). |
| No. 22. Baby Leaflet. | Anti-Fly Placards (11 inches by 19 inches). |
| No. 23. The Vital Statistics Law. | |

THE Health Bulletin



PUBLISHED BY THE NORTH CAROLINA STATE BOARD OF HEALTH

Vol. XXVIII.

MARCH, 1914.

No. 12.

HEALTH BREVITIES

Your county has just as much health as it cares to purchase.

"Why protect the pig and forget the children?"—Senator Owen, Oklahoma.

The fellow that's afraid of vaccination never saw real smallpox.

The first and prime condition of good government is good health.

Investigation has shown that tooth decay is by far the most prevalent physical defect among school children.

Chicago has ten dental dispensaries for the care of the teeth of its school children. North Carolina has none.

"Vaccination against smallpox should be a requisite to admission to any school, public, parochial or private, and periodical re-vaccination, particularly in times of epidemics, obligatory to continued attendance at school."
—Dr. S. Adolphus Knopf.

Unless your doors and windows are well screened it will do little good to use the fly swatter. The swatter is all right to use to kill the few flies that get in despite the screens and your vigilance. But it is a waste of time and labor to use the swatter in the unscreened house.

It is only twenty years ago that medical inspection in schools was started in the United States. Great Britain and Germany began the practice some years earlier.

We keep school records of the mental equipment of our children. Why not keep physical records of each pupil from the time he enters until he graduates?

In measles there are cases that never break out, and in whooping cough there are cases that never whoop. However, these cases are just as "catching" as any.

You don't need to apologize for all your flies when friends and neighbors drop in to see you. Your friends and neighbors know just as well as you do where those flies come from.

We eat three times a day, but we must breathe eighteen times a minute. And every breath we take should be of good, fresh air, not stale, second-hand or used, cast-off air, either.

Few of us will eat tainted food, but most of us breathe tainted air. This moves us to say that if we were as careful about the air we breathe as we are about the food we eat, the death rate from the dirty air diseases would soon reach the vanishing point.

GOLD BRICKS IN HEALTH

How Fools are Soon Parted from their Money, Lives and Health

WARREN H. BOOKER, C.E.

What do you think of a fellow that bites on a gold brick swindle these days? Feel kind o' sorry for him in a way, don't you? And yet, when he loses his money, we just say, "A fool and his money are soon parted." But what about the scoundrel that gets away with this poor fellow's hard earned cash? What do we think of him? What do we think of all his accomplices? The prison is too good for them, and they are rarely ever sent there, any way.

But where there is one gold brick in business there are a dozen in health. Where there is one fellow selling mining stock that will never mine, or real estate that is not real (lots in Long Island Sound, out in the ocean, or in some river bed), there are a score of scoundrels and their accomplices,

several shades blacker than the gold brick shark, who are not only filching the hard earned money from our people and giving them nothing for it in return, but they are actually robbing them of their most precious personal possession, their lives and health.

Whom do I mean by the scoundrels and their accomplices? I refer to the great host of patent medicine frauds and fakes, and the accomplices are none other than a great lot of the newspapers and religious papers which exploit the advertisements of these frauds. Of all papers that should be clean from cover to cover, that should bend every effort to make sure that

what is advertised in their papers is what it is claimed to be, it certainly devolves upon the religious press to set an example and, above all, to be honest with their readers.

You would never think of letting some one thrust a loaded revolver into your hand, put your finger to the trigger, aim the gun at one of your friends and commit murder for you, while you deliberately turned your head in another direction. Did it ever occur

to you that that is just what takes place when a paper, religious or secular, sells its advertising space to such frauds? It is the modern way of selling our birthright for a mess of pottage. Was Judas much more to be blamed for betraying innocent blood for thirty pieces of silver than we are,

LOOK OVER THE ADS IN YOUR FAMILY PAPERS THIS EVENING. IF YOU FIND PATENT MEDICINE ADVERTISEMENTS, JUST DROP A LINE TO THE EDITOR AND TELL HIM WHAT YOU THINK OF SUCH ADVERTISEMENTS. THE ONLY WAY TO STOP SUCH THINGS IS TO LET THE FOLKS PUBLISHING THESE PAPERS KNOW WHERE YOU STAND ON SUCH MATTERS.

if we betray our fellow man by being party to a plot to rob him of his money and give him, at best, some worthless drugs? Perhaps we also give him a shove and a kick down the road of ill health toward a premature grave—sometimes from the dangerous character of the drug, more often because the promises made delude the victim and keep him from getting genuine medical relief.

To be concrete, witness the following incident. The accompanying picture shows a man who saw "Nature's Creation" advertised in a paper. According to the advertisement, the medicine will cure consumption. It sells for \$5.00 a bottle. The poor,

that in Chicago the venereal quackery emaciated fellow in the picture is a consumptive in the last stages. He admits having taken at least twenty bottles of "Nature's Creation." However, he did not pay for the medicine, but received it in return for a testimonial he wrote endorsing this nos-



A consumptive in the last stages and his patent medicine bottles (Nature's Creation) which helped to put him there.

trum. This young man is now in a sanatorium for the treatment of tuberculosis, and has little hope of recovery. After learning the real worthlessness of this nostrum, he consented to be photographed with a number of the empty bottles. He is indeed a woeful spectacle.

Verily, a fool and his health are soon parted, but who parts them? Too frequently the advertisers of patent medicines.

Be sure to see that the birth of any child in whom you are interested is reported and recorded; it may mean a great deal to that child in later years.

GOOD HUNTING

How the Light of Publicity Knocks Out Patent Medicine Frauds

Quack doctors are the most vulnerable of big game. How astonishingly tender their commercial susceptibilities are has been shown by the *Chicago Tribune*. One week of exposure through the *Tribune's* columns practically ruined every venereal disease quack in the city. Some shut up shop and disappeared. Others sat idle in empty offices, forlorn spiders at the center of flyless webs. Never before was so powerful and profitable an industry brought to such instant wreckage. What destroyed this pirate trade was not alone the direct result of the exposures, definite and potent though that was. The lethal blow was the eviction of all this class of advertising from the daily press. Within four days of the *Tribune's* declaration of war every morning and afternoon paper in the city, whether printed in English or in some other language (and there is a great number of Chicago newspapers published in foreign tongues), which was carrying this class of copy had been shamed or alarmed into throwing it out. The evening paper of William R. Hearst, who a year ago bragged mightily of having foregone his alliance with quacks, was forced to exclude advertising which represents in the neighborhood of \$70,000 a year blood money to that apostle of journalistic purity. Finally, the militant *Tribune* gives notice of its intention to stir up prosecutions under the law; or, if the present law be inadequate, to agitate for the enactment of a stronger statute under which the malefactors may be brought to book. In view of this newspaper's established reputation for carrying out to the fullest conclusion whatever it undertakes, it is a fairly safe prophecy

game is up. Out in Seattle the *Sun*, a lusty infant of Far Western journalism, performed a like service for its city; and some years ago the *Cleveland Press* made a valiant but only partly successful effort in that vicinity. But the Chicago campaign has been by far the broadest and most significant. On its letterhead the *Tribune* terms itself "The World's Greatest Newspaper." To our mind its antiquack victory goes far toward making the boast good.—*Collier's Weekly*.

RESPONSIBILITY

Who Is Accessory to the Patent Medicine Fakery?

Says one of the quarry of the *Tribune's* quack hunt: "I have paid most of what I made to newspapers that printed my ads." Despite its source, that statement is indubitably true. Without newspaper advertising no quack can hope to do business. The *Tribune*, in its articles, showed that as soon as the advertising was cut off the venereal sharks ceased to receive patients enough to keep their offices going. Consider, you newspaper reader, the true significance of this. It means that the responsibility for quackery in your town rests with your daily paper. If the newspaper owner didn't accept that poisoned and reeking money the quack couldn't continue to take his profit of human terror and human misery. And the responsibility of the newspaper is readily brought home. No use in attacking the quack except by process of law, and most state laws along this line are wretchedly flimsy. Moral suasion cannot influence the crooked practitioner because he has no character. But a newspaper has a character, and that character is part of its capital. Where the emoluments of evil advertising bring open disgrace upon a journal that journal will drop the advertising. It took the *Tribune*

but four days to clean up every newspaper in Chicago. In Portland the papers were compelled by force of public opinion, voiced through a committee of citizens, to discard this class of business; and now there are no venereal quacks in Portland. What city will be next in line? The task is possible to any community which can organize public opinion. The method is simple and direct. Compel the newspapers, by force of fear or by the persuasions of decency, to cleanse their columns, and quackery will promptly and surely die of inanition.—*Collier's Weekly*.

NO HELP YET FOR FAT PEOPLE

Read This Before You Spend Money for Obesity Cures

Since the beginning of time those fortunate, or unfortunate, persons who have had too much to eat and too little to do have endeavored to escape from the bondage of fat by some means which would reduce them to normal proportions, but leave them free to overeat and be lazy. Probably antifat remedies were advertised to the Roman patricians 2,000 years ago. They have been ever since, and they always will be so long as there are men and women who eat more than they need and work less than they ought to. As these individuals generally belong to the leisure class, with plenty of money to spend on self-improvement, they form a tempting group for the confidence man and the fake medical swindler. Antifat remedies and reducing treatments have been sprung on the public by the score. Most of them have been promptly exposed as frauds or have died a natural death as soon as a reasonable number of victims found that they did not fulfill the extravagant promises made by their promoters. The public has recently been treated

to a demonstration of the antifat remedy *de luxe*. The combination of a professional antifat faker with a popular and well-advertised burlesque actress, the use of an exuberant and variegated vocabulary in framing advertising, and of an unlimited amount of printer's ink in making extravagant promises to the overfed, has resulted in breaking the news to the expectant world that the "Texas Guinan World-Famed Treatment for Corpulency" will relieve all the ills of fat people for \$20 a bottle. This would be lovely if it were true, but, unfortunately, it is not. The man behind the scheme is Walter C. Cunningham, who in 1906 is said to have served a term in jail in Minneapolis for fraudulent acts in the real estate business, and who later went into the mail order medical fake business, probably as offering greater profits with less risk. In 1909 he started, in Chicago, a mail order bust developer and wrinkle eradicator concern under the name of his wife, Evelyn Cunningham. In 1910 he sold out this concern and started another under the name of Della Carson. In 1911, after being divorced from Evelyn Cunningham, he married Marjorie Hamilton, the "calendar girl," and went to Denver, where he started the "Marjorie Hamilton Obesity Cure," the "Princess Tokio Beauty Company" and the "Cunningham Mail-Order School." Early in August dispatches from Denver stated that the "calendar girl" had been "deposed as the light in the lives of fat women who seek to reduce." In an interview in a Chicago newspaper at about the same time Marjorie said: "Mr. Cunningham now has another scheme for money-making. I would advise the people who are dealing with him to look out." Mr. Cunningham did have another

scheme. It involved another woman whose name he could use and another fat-reducing fake. This time the woman was Texas Guinan, and the wonderful remedy which was offered as an "absolutely unfailing fat reducer" was found on analysis in the laboratory of the American Medical Association to be a solution of alum and alcohol in water. A bottle of this wonderful mixture costs 30 cents, and was offered for sale by Cunningham as "Texas Guinan's World-Famed Treatment for Corpulency," at the low price of \$20, leaving an insignificant margin of profit on each bottle of \$19.70. *The Journal of the American Medical Association*, which has just published a complete exposure of this fake, says that it will not have any more effect on surplus fat than so much ditch water, and that its sale under the claims made for it and at such an outrageous price is a plain swindle and fraud. The fact that this business is carried on almost exclusively through the United States mails ought to make its career a short one. However, as soon as this fraud is squelched, the versatile Cunningham will doubtless find another woman behind whose name he can hide, and with whose assistance he can sell another worthless mixture at an exorbitant price. That unfortunate part of the public which suffers from too much fat ought to understand by this time that there is no remedy for this condition but to eat less and work more, the only two things which most of these victims are unwilling to do.

Who's Been There, Knows

She—"Take care, Alfred! That isn't the remedy for seasickness. Don't you see the bottle is marked poison?"

He—"That's the one I want."

HOW MUCH LIQUOR A SICK MAN NEEDS

Is the Prescribing of Liquor a Privilege That is Abused? A Remedy Proposed

WARREN H. BOOKER, C.E.

"Just a little on account of sickness." That used to be an old excuse for keeping the jug around the house. Now it is becoming an excuse for getting whiskey by the pint or quart from the drug store. The question has been raised if prescribing liquor is not, in some cases, getting it "under false pretenses," or at least a privilege that is abused. This tendency, it has been noticed, has been on the increase within recent years.

In order to get at the facts in the case, to learn definitely if the general attitude of the medical profession is to increase or decrease the use of alcoholic liquors in treating disease, and to establish a rough standard, rule, or guide, showing the average quantity of alcoholic liquor now used by the best

authorities on medicine, the Secretary of the State Board of Health wrote to a number of the best hospitals

in the country, and to all the physicians in the State who have been officers in the State Medical Society during the last five

* * * * *

DR. WILEY ON WHISKEY AS MEDICINE.

* Whiskey and brandy are in serious danger of losing their time-honored places in the Revised Pharmacopeia of the United States. Dr. Harvey W. Wiley is Chairman of the Pharmacopœial Convention and one of the Committee on Revision. In speaking of this elimination of brandy and whiskey from the list of reputable drugs, Dr. Wiley says:

* "The arguments which have been advanced in favor of doing away with these articles are in my opinion sound and convincing in so far as principles are concerned.

* "In brief, the argument is as follows, namely, that brandy and whiskey are no longer used as medicines in sufficient quantities to warrant their retention by the Pharmacopeia. This fact has been ascertained by consulting large numbers of acting practitioners, who have responded in such a manner as to show that brandy and whiskey are rarely found at the present time in the prescriptions of the most progressive physicians."

—Dr. Harvey W. Wiley.

* * * * *

* years, and asked them to give definite facts as to the number of patients they treated in a year, together with the total amount of liquor prescribed.

* A great many answers were received. From these it was found that, for a total of 186,052 patients treated during one year, a total of 601 gallons of whiskey and brandy were prescribed. This, reduced down, proved to be an average of about three-fourths of a tablespoonful per patient during the entire year. This result, from such a large number of cases from the practice of reputable physicians and hospitals, can only be construed

as being an index as to what constitutes good practice in regard to the use of liquor as medicine.

From the replies received to the letters of inquiry, two important points were brought out:

1. A great many of the doctors stated that they were using much less liquor now than they did from five to ten or fifteen years ago, and that, too, patients are more successfully treated than when more liquor was prescribed.

2. It could not but be noted that, in general, doctors who had received their degrees in medicine within the last ten years were prescribing a great deal less liquor than doctors who graduated prior to that time. A great many of the very best doctors of the younger set prescribe no liquor whatsoever.

From these two points it appears that unmistakably the tendency in the best medical practice of the present day is to decrease rather than increase the quantity of liquor prescribed.

One of the most striking features of the whole matter is that while the *best* medical practice both in the State and in large hospitals outside the State shows a strong tendency to decrease the amount of liquor prescribed, yet the actual amount of liquor prescribed by the profession as a whole is believed to be largely increased during recent years, and it will be noted that this increase is coincident with the more rigid enforcement of our prohibitory laws.

The replies to the questions submitted were so interesting that we can not refrain from quoting the gist of a few. Space forbids longer quotations, but these are typical.

"I find it advisable to prescribe whiskey to perhaps less than ten patients a year."—W. L. Dunn, M.D., Asheville.

"During the year I have prescribed no whiskey or brandy at all."—James J. Philips, M.D., Tarboro.

"With all of our practice, including the hospital and our private work, we do not advise an amount exceeding one gallon a year."—J. T. Burrus, M.D., High Point.

"The amount used in the institution for the year has been an average of 20¼ ounces per patient. This rather high average is due to the quantity required by certain chronic patients, and will be reduced this year."—Albert Anderson, M.D., Superintendent State Hospital for the Insane, Raleigh.

"I do not use more than one drop of spirits to the patient."—F. R. Harris, M.D., Henderson.

"I am sure that on my hospital services only two or three patients a year ever get alcohol in any form by my order."—H. A. Royster, M.D., Raleigh.

"I have prescribed *no* whiskey or spirits of any sort during the last year, or previous one."—Wm. M. Jones, M.D., Greensboro.

"I don't prescribe whiskey at all."—John R. Irwin, M.D., Charlotte.

"During the last five years of my active practice I am satisfied I did not prescribe over a pint a year, and if I were practicing now I would not prescribe any at all."—J. T. J. Battle, M.D., Greensboro.

"I have never prescribed whiskey at any time; have advised patients to take very small quantities of brandy, and that was in very few instances. Since I gave up general practice I have not had any chance or occasion for the use of such."—M. M. Saliba, M.D., Wilson.

"I prescribe for 3,600 patients per year, including twenty-five 'drunks.' I prescribe one ounce of spirits for each of these. Otherwise I never write a prescription for spirits."—E. T. Dickinson, M.D., Wilson.

"I prescribe 8 quarts of whiskey per year—this would be 20 drops for each patient."—Frank H. Russell, M.D., Wilmington.

"I do not prescribe whiskey. However, I recognize it as a valuable remedy."—Dr. D. A. Dees, Bayboro.

"I do not prescribe it in any shape."—J. E. Koonce, M.D., Wilmington.

"I don't suppose I have prescribed on an average one-half gallon of whiskey per year, and I suppose I see at least as many patients as any physician in the city. I believe the neces-

sity for prescribing whiskey is very seldom indeed. In fact, I believe there are other remedies that would be equally as good, if not better, in those cases in which it was prescribed."—A. J. Crowell, M. D., Charlotte.

These few letters taken at random show unmistakably the present trend of medical science in regard to the use of liquor in sickness.

THE REMEDY SUGGESTED.

In view of the facts in the case, it is plain that some sort of remedy is needed for the present drugstore liquor trade. It must be admitted that very few, if any, physicians voluntarily prescribe much of the liquor that is now bought at drugstores. Much pressure is brought to bear upon them by a certain class of drinkers or patients, whereas if the doctors had some good, concrete argument to fall back on which would appeal to this class of people, they could, without causing offense, avoid doing what their consciences decree is wrong. In other words, we believe that a remedy for such conditions would be more welcome to doctors than to any one else.

For a simple, direct means of effecting this end, it might be well to add a clause to our search and seizure law requiring that druggists' prescription files be audited, say quarterly, and the average quantity of alcoholic liquors prescribed per patient be made part of a public report to the mayor of the town. Or, as this report might frequently be pigeonholed, it might be better still to have these facts published in at least one local newspaper. When once the public knows that, in the best medical practice, less than a tablespoonful of liquor per patient treated is given annually, then the weak-kneed doctor will have something to fall back on.

WOULD YOU BLAME THE LORD?

Two Conflicting Stories. Which Will You Believe?

Slander and libel of our fellow men are usually punishable by law. Yet we frequently hear good people, sometimes even ministers, blame the Lord for things for which we ourselves are entirely responsible. Witness the following incident, such as occurs all too frequently in every North Carolina community:

"The hour for the funeral had arrived, and neighbors were coming in to the services. The dead baby lay in a little white coffin lined with white satin, was dressed in white, and flowers in profusion decorated the room and testified to the sympathy of the neighbors.

"The preacher made a short prayer, uttered a few comforting words, a song was sung, the little baby was borne to the white hearse by four young girls in white, and the procession moved toward the cemetery.

"The baby had died from intestinal disorder induced by wrong feeding, yet the preacher had said: 'The Lord giveth and the Lord has taken away.' The doctor told how it all happened. 'That baby,' said he, 'was born strong and healthy. The mother nursed it for weeks, but finding that nursing interfered with bridge parties and other social affairs she provided a bottle, and when she was absent, her colored nurse fed the baby cow's milk. This irregularity of breast feeding soon lessened the amount of the mother's milk, and she concluded that she would entirely cease nursing. The child seemed to do well on the bottle for a while, but it soon became evident that something was wrong. At one time I saw the mother give a piece of rich pie crust to her baby, and I warned her against doing so. She told me that she found that the infant liked coffee, and a little was frequently given to it. And so, despite my medicines and my warnings in regard to feeding, the child's digestive apparatus gradually broke down. An old grandmother told the mother that

it was natural for babies to throw up. Another one prescribed soothing syrup which contained morphine. Another one recommended anise seed cordial, and so it went; the young mother being willing to depend upon drugs and remedies, but not willing to practice prevention by feeding rationally. When the digestive machinery was put to the bad the baby finally took dysentery and died.'

"Continuing, the doctor said, 'I had three infants die of pneumonia last winter, simply because their mothers would not give them enough fresh air. In spite of my instructions that plenty of air made babies strong and protected them against colds and coughs, still they would cover their babies' faces with veils and napkins and keep the life-giving air away. The foolish idea,' said the doctor, 'which seems to exist everywhere, that fresh, cold air is injurious, must be somehow extracted from the minds of our people, or else pneumonia-dead babies will always be with us.'"

There are the two entirely different stories about the cause of this baby's death. These two stories are typical of a great many other two-sided stories told in regard to thousands of needless baby deaths that occur in North Carolina every year. Are you inclined to agree with the preacher and place the responsibility on the Lord, or with the doctor and acknowledge that a very large part of it is "up to us"?

Let's stop a great lot of these needless infant deaths. It can be done by impressing upon the mother the importance of proper care and feeding of her baby. If you know of a mother who probably has very little general knowledge regarding the best way of raising babies and making them strong, vigorous children, just write the State Board of Health asking that a bulletin on "The Baby" be sent the mother. It will be sent free of charge by return mail, and no mention will be made that it was requested.

Sound sanitation makes good health "catching."

MAY HAVE OUR OFFICE COPY

Since the exposure of the Oxypathor fraud by the State Board of Health a few months ago, letters have continued to pour into this office expressing the appreciation of our readers that this fake was nailed and laid out cold. We have not space to reproduce many of these letters, but here is one from the mayor of a North Carolina town which we can not help giving our readers:

State Board of Health. Raleigh, N. C.:

GENTLEMEN:—I have been receiving your monthly bulletin and I very much appreciate the same. I loaned a friend my copy in which you exposed the Oxypathor, and he has never returned it. I think it was destroyed, as his brother is an agent for the Oxypathor. Will you please send me another copy of the Bulletin in which you expose the Oxypathor? I would very much appreciate it if you could do so.

Very truly,
—, Mayor.

Such a man shall have another copy of the Bulletin containing this article if we have to give him our office copy.

In only one way can future generations be relieved of the yoke of preventable disease, and that way is by a general dissemination of facts concerning those diseases. Is there any medium that could be more effectively employed for such teaching than the school? But first we must have teachers who are capable of such teaching.

Indiana is preparing to add a course in public health and sanitation to the curriculum of its school of medicine in connection with the State University, with the idea of preparing physicians to intelligently meet the problems of public health work.

WE MUST HAVE GOOD TEETH

A Practical Talk to Children and Grown-ups Who Don't Want to be Bothered with Toothache and "Stomach Trouble" When They Get Older

Good teeth, like good health, are not valued as they should be, and it is only after we have lost either that we understand how little we valued them.

If you have never thought of it before, notice now how few grown-up people have really pretty teeth; and when you see a man or woman who has beautiful teeth, observe whether or not that person has not only good teeth but also splendid health. There may be an exception now and then,

but it is the rule that a beautiful set of teeth and perfect health go hand in hand, and we are going to try to show you why this is, for there should be a reason for it.

When little babies are born their natural food is milk, for a time, for which no teeth are required and for which nature provides none. As the months pass, the baby begins to require solid food, and as this time

comes nature provides additional power in the stomach to digest that more solid food, and in addition furnishes in the mouth the tools by which this solid food may be crushed, ground up and divided so that the juices in the mouth and stomach can quickly and easily come in contact with it and fit it to be taken up into the body for nourishment.

During the time that the teeth are grinding it up and separating it into minute particles, there is being poured into it the saliva of the little glands in the mouth, which is the first preparation needed in its digestion. If it were not for this fine division the food gets in being ground up by the teeth, it would enter the stomach in more or less large, solid pieces, unmixed with the saliva, and the juices of the stomach would then be able to attack

only the outside of it. While these juices would in time, perhaps, digest it, yet the greater work that they would be required to do would, after a while, so tax their working power that they would and do become weak and unable to do the additional work, just as a man or a horse who is sent out every day to do more than he is capable of doing becomes weaker and

weaker until at last he can do no more. You will see, then, how valuable it is to have each and every tooth in perfect condition, simply from the standpoint of the preparation of the food for digestion.

When a person has a decaying tooth in his mouth, he not only takes away just that much of his tools for the preparation of his food, but he begins

THE PRIME ESSENTIAL IN HAVING GOOD TEETH IS PREVENTION. PREVENT DECAY BY THE REGULAR USE OF THE TOOTHBRUSH MORNING AND EVENING. OMIT WASHING YOUR FACE AND HANDS RATHER THAN CLEANING YOUR TEETH. THEN PREVENT TINY CAVITIES FROM BECOMING LARGER BY GOING TO A DENTIST AT LEAST ONCE EVERY YEAR OR SIX MONTHS AND HAVING THE TEETH CAREFULLY INSPECTED AND TINY CAVITIES FILLED.

to mix with that food other things than the saliva. The tooth commences to pour pus (matter) into the mouth to be mixed with the food. The cavities in the tooth are splendid little nests for the germs to live in and raise their large families. This pus, or decayed matter, and germs, being mixed with the food, pass into the stomach and begin to attack the health.

When one tooth after another is decayed in this way you can see that instead of pure, wholesome food being taken up by the body all the time, poisons are mixed with it, and after a time the persons begin to *wonder why they do not feel well, and say they have stomach trouble*, when in reality what they have is tooth trouble.

To show you what decayed teeth mean, we want to tell you of twenty-seven boys and girls in Cleveland, Ohio, whose teeth were in very bad condition.

These twenty-seven little girls and boys were not doing well in their school work, and it was determined to see what effect the substitution of good teeth for bad teeth would have on backward children. So each of them was put in the care of a good dentist and his teeth restored to as near good teeth as was possible. After this was done a test of their school work was made and compared with their previous school work. This test showed that all of them had improved 99.8 per cent. In other words, these children were able with good teeth to do just twice as well as they did with bad ones.

Now, the care of the teeth is not a hard matter. It means only a little habit of cleanliness which, after it is acquired, will never be neglected and which will repay you many, many times.

If you are not in the habit of brushing your teeth, start today, have your

toothbrush where you will see it before you night and morning, but especially at night, for no one should ever go to bed with dirty teeth.

In using the brush, in addition to brushing it back and forth across the teeth, you should brush from the gums down on the upper row and from the gums up on the lower row. This is important, for in this way we remove the food that is between the teeth.

Too much brushing of the teeth is not only unnecessary, but may be harmful, by irritating the gums. Brushing the teeth night and morning is enough.

In spite of the best care that you give your teeth, there will be times when little spots of decay appear, and for this reason it is important that everyone have a good dentist examine the teeth once or twice every year in order to discover these little decayed places and take care of them at once, and so prevent them from becoming cavities.

Your father or mother sometimes may forget that it is time that your teeth need looking at, and often will forget to notice whether you have cleaned them; so you must learn to think of these things yourself, for they are, after all, your teeth, given you for your use.—*Bulletin St. Louis Health Department.*

Iowa has a new law regarding the reporting of cases of venereal disease. Failure to comply with the regulations makes the physician liable to a fine of one hundred dollars, thirty days' imprisonment, and revocation of his license.

Different Complaint

"I believe I will run down to Eureka Springs."

"Week end?"

"No; rheumatism."

THE DOCTOR'S LARGER DUTY

His Greater Privilege and the Possibilities Within His Reach

Address Before the Sixth District Medical Society by Dr. F. R. Harris, Henderson, President

We are all keenly alive to our duty to our patients, but may it not be true that we are so engrossed with the individual that we too often forget that we owe a larger service to the community? When we recall that, in 1911, we had in North Carolina over 2,000 more deaths from tuberculosis, over 1,000 more deaths from pneumonia, over 1,000 more from typhoid, over 1,800 more from diarrheas (under two years), and nearly 500 more deaths from whooping cough than we would have had with the average death rate in the United States, I am forced to the conclusion that somebody is at fault. This lamentable state of affairs is due to indifference on the part of the public, and this is due to ignorance of the laws of health.

Now, to whom can the public look for relief but to our profession? We know the conditions; *we* know the remedy. Then is it not our bounden duty, as citizens, to give the benefit of our knowledge to the public? The State Board of Health, with its efficient and wide-awake secretary, is doing all it can with the petty sum at its disposal. But this is only the entering wedge. It rests with us, the rank and file of the profession, individually and collectively, to do our part in this great work. If each member of this society would do his part in this work during the coming year, with the pen, on the rostrum, on the street, and especially in the homes whenever and wherever the opportunity offers, what a strong right arm might we not be to the State Board of Health, and what a blessing we would be to the public in the prevention of sickness, the prolongation of life, and in promoting,

in many ways, happiness and prosperity in our beloved State! This is what I regard as the paramount privilege and duty of the profession.

THE PHYSICIAN AND VITAL STATISTICS.

Our last General Assembly passed a strict and comprehensive vital statistics law. It is incumbent upon us, as guardians of the public health, to popularize this law by telling the people of its significance. In my judgment, we shall find a great many obstacles to be overcome before the people can realize that it is for the public good. Let us lose no opportunity to aid the State Board of Health in popularizing this advance step by pointing out to the people the advantages that will accrue from its enforcement, and even by going out of our way to personally see to it that every birth and death is reported to the local registrar of the town or township, whether or not it occurred in our practice.

THE PHYSICIAN AND PREVENTIVE MEDICINE.

Let our slogan be, "A competent health officer paid for his entire time for each county in the State." Pardon me if I suggest right here that we see to it that in each instance a *competent* county health officer is selected, and not be guilty of selecting a man because he needs a job. Rather let us select a man because the job needs that man. With a competent health officer paid for his entire time in each county, each county should arrange a program of popular lectures to be given by the members of the county society throughout the county, partic-

ularly in the school houses. In this way every section of every county in the State can be reached, and untold good will result. In my county, members of our local society have done just such work as this. We have used not only the school houses, but also the churches, and we find that the people always attend these lectures. The public is beginning to see that there is something in sanitation.

The highest form of service which the medical profession can perform for mankind is in the prevention of disease. It is in the study of the prevention of disease that medicine has no rivals, and is least likely to be misunderstood. This realm is not invaded by the charlatan, the pseudo-scientific sect, or the patent medicine man. These are all zealous in the treatment of disease, but the science of medicine differentiates itself from them in that, while they are concerned for the sick, scientific medicine is searching out the causes of disease and applying preventive measures. Medicine, as an organized profession, is the only great movement having as an aim the reduction of morbidity by preventing the well from becoming sick. Intelligent and scientific effort in the prevention of disease is tangible and can be measured, and is freer from confusion than is treatment. In the treatment of disease the forces of nature are just as kind to the mercenary quack, with his "incomparable elixir," as they are to the conscientious and skilled physician. The patients of both will recover. Therapy is the inexact part of medicine.

We all know what preventive medicine has done with cholera. The same may be done with typhoid fever. The 15,000 persons who died of typhoid fever in the United States during the past year are a needless sacrifice, for medicine has developed the knowledge which, if applied, would make typhoid fever an unknown disease. Medicine

has perfected the knowledge of this disease and the means for its prevention, and the people want the disease stopped, but the representatives of the people are busy with mergers and tariffs and appropriations and jobs, while the pale faces of those 15,000 dying of a preventable disease are seen only by the profession of medicine. When some community is awakened by an awful epidemic, it arouses itself and local measures are applied, always successfully, to prevent the disease, but what is done for a village should be done for the state and nation. This will be done,—it should be done now—and then typhoid will pass into history, a conquered disease.

GIVE FACTS ABOUT ALCOHOL.

The time has come when we should take a positive stand on the question of alcohol. We know the harm that alcoholic beverages are inflicting upon the people. The ravages of alcohol are as well known as those of typhoid. We know them so well that we scarcely need to discuss them among ourselves. We know how much weaker is the resistance to disease on the part of the man who has habitually taken alcohol. We know the frightful mortality in pneumonia and Bright's disease among drinking men. We know the frequency and dangers of delirium tremens, occurring, as it often does, in men who have drunk daily but never in amounts to produce intoxication. We know the difficulties experienced by the drinking man when he requires a surgical operation. It devolves upon us to instruct the public as to the dangers of alcohol, just as it does to instruct them concerning the dangers of polluted water or bad milk. Alcohol is not a food. It causes one-tenth of the deaths in the United States, and yet the people spend over \$2,000,000,000 yearly for the poison. It devolves upon us to give the facts to the public. I am not a fanatic on the subject

of alcohol. The facts are bad enough without the exaggerated statements so often made by the uninformed temperance advocate. The time is ripe for a great and sane temperance movement, conducted by our profession, telling the public simply the truth about alcohol, disseminating knowledge of the incontrovertible facts. The value of such a movement to this country is beyond the power of the most hopeful to foresee.

VENEREAL DISEASES.

Our profession has signally failed in its duty to the public in that we have not given them the facts in regard to venereal diseases. Of course I do not mean that we should expose individual cases—a thousand times no!—but we should let the people know that an authority says that in the United States 65 per cent of adult males have had gonorrhea; that in this country 800,000 males reach maturity annually, and of this number 500,000 become infected with gonorrhea. The public should know that, of the 14,000,000 male adults under the age of thirty in the United States, the most reliable observers calculate that 8,000,000 have gonorrhea or its sequelæ. Our women should know that a man who has once had gonorrhea is a dangerous man to marry, and that from 65 to 75 per cent of the women who wed are accepting this danger. The public should know that one-third of the deaths from apoplexy are nothing but syphilitic affections. They should know that locomotor ataxia, Bright's disease, paresis, many other forms of insanity, and those unaccountable moral lapses are frequently venereal indications. The trail of physical suffering which follows in the wake of these diseases is insignificant when compared with the mental anguish, the broken hearts, and

the saddened homes that mark their path.

At the bottom of these troubles lies the ignorance which it is incumbent upon us to help to remove. Whenever the public realizes that it pays, in dollars and cents, to prevent disease, to say nothing of the relief from suffering and sickness, they will coöperate with us, and not till then.

In conclusion, I wish to repeat what I said here a year ago. We are living today in a time of transition, I might say a time of crisis. While our politicians are fighting over the tariff, we, the medical profession, have issues of paramount importance to solve. For what is more important from every point of view than the health and racial integrity of a nation? Let us be in the vanguard with Him who said, "I am come that they might have life, and that they might have it more abundantly." Let us then realize the importance of the task before us. Let us go forward, harbingers of hope, pluck the prematurely dead from the tomb, strew flowers upon the path of the living, and, in our unselfish service to humanity, emblazon our names high up among the immortals.

No Alternative

Doctor (to operetta Diva who wishes to be vaccinated)—"Shall I vaccinate your arm?"

Diva—"Heavens! No, of course not. Think of me as an artist with a scar on my arm! You must vaccinate me where it won't show."

Doctor—"I think you had better take it internally."

Keep your children away from other children who are sick, at least until you are sure that the sick child has no contagious disease.

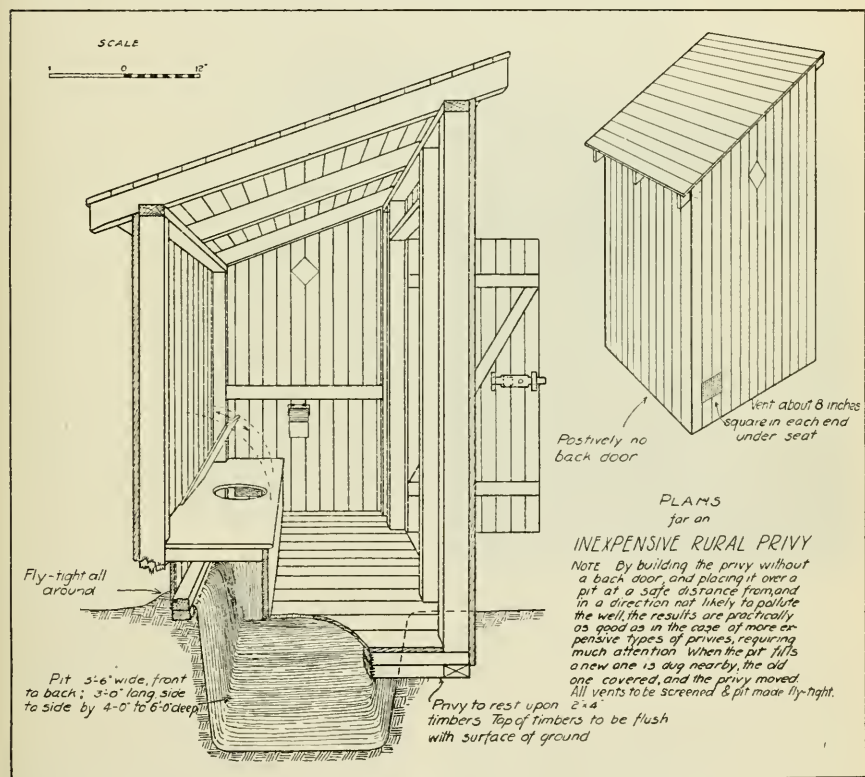
THE PRACTICAL RURAL PRIVY

Why So-called Sanitary Privies Are a Failure in the Country and a Partial Remedy Proposed

WARREN H. BOOKER, C.E.

Perhaps the biggest single sanitary problem in North Carolina country homes today is the satisfactory disposal of human excrement. Ever since

soon become history, typhoid would become rare, and we should still have hundreds of last summer's babies with us.



PRIVY FOR RURAL USE

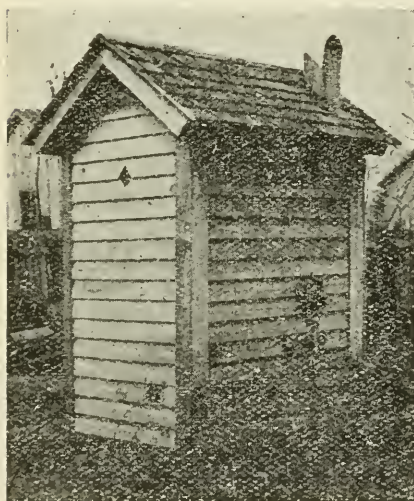
Built without a back door and over a pit. The screened ventilator under the seat had best be omitted unless the odor becomes very objectionable.

hookworms were discovered there has been much talk about sanitary privies, but from present indications the last word has not yet been said. It is a fact that with the general use of almost any form of the so-called sanitary privies, hookworm disease would

Our present methods of caring for human excrement range all the way from elegant porcelain fixtures in tiled bathrooms to bent-over saplings or no privies at all, even at school houses. We can not all afford porcelain equipments, and even the richest among us

can not afford to take chances with hookworms, typhoid and diarrheal diseases.

Various types of so-called sanitary privies have been advocated from time to time. Most of them represent sanitation gone mad and common sense conspicuous by its absence. Theoretically, they will all accomplish the one end sought. We must admit, nevertheless, that most of them have been flat failures. Why? Primarily because none of them were ever built.



OLD OPEN BACK PRIVY REMODELED.

By closing up the back and digging a pit under the privy the fecal matter cannot be scattered or exposed to flies or domestic animals. A good type of rural privy.

And why were they never built? Because, in the first place, it usually costs from \$20 to \$50 to build them; and, in the second place, they require daily or weekly, or at least frequent attention. Either feature is too much of an innovation for the rural dweller who has no privy at all, or only his customary bent sapling. We are fast learning that with such people sanitary science must make a "horse trade." With such people it is folly to talk of \$20 to \$50 concrete arrange-

ments, or to tell them that they must bury a can of fecal matter once or twice a week, or add a bucketful of water daily. In other words, we are fast coming to the point where we would be glad to see a six-tenths or eight-tenths efficient privy to no privy at all.

At the risk of making ourselves unpopular with enthusiasts over high grade sanitary privies, we venture to describe briefly an inexpensive form of privy for rural use which requires the minimum of care and attention and which costs but a few dollars to build complete, or only a trifle for two or three boards and a few nails if an old open-back privy is remodeled.

The cut on the preceding page illustrates a form of privy which we believe will meet nearly all the requirements in rural districts where there is sentiment for improvement along this line. All that is necessary is to dig a hole in the ground three or four feet square and from four to six feet deep and set the privy over this hole so that flies can not have access to the fecal matter. That is practically all there is to it. Should this hole fill up in a year or two, all that is necessary is to remove the privy, dig a new pit nearby, place the privy over the new pit, and cover the contents of the old pit with the excavated earth. If the sides of the pit cave in readily, they may be walled up with loose stones, brick, or boards, or one or two empty barrels may be used.

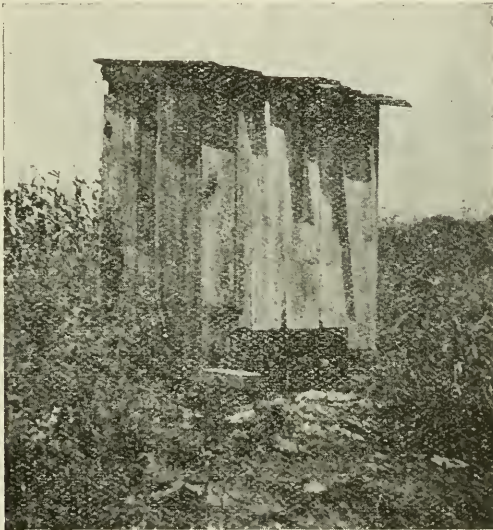
One of the principal advantages of such a form of privy is that almost any old privy with an open back can readily be made over by weatherboarding this opening down to the ground. There is little danger from flies in the case of such a privy, as flies will not go down into the dark pit. There will be some odors, but they are not dangerous to health. Where odors are objectionable, a trap door may be placed over the hole in the seat, so the

door will fall down and cover the hole whenever not in use. As such lids are an arrangement not generally appreciated by renters or careless individuals, they may usually be dispensed with.

Where there is real objection to odors, and where it is certain that extraordinary care will be taken by every one using the privy, a small vent not over four to eight inches square

tion with such an arrangement is very poor, because there are no hot expanded gases present in the flue, as in the case of a stove or fireplace, to cause a draft.

In order to furnish light inside the privy, to exclude flies, and, at the same time, to protect the seat from rain and snow, it is best to have the little side openings near the top of the privy covered with glass. The door



A type of privy all too common in rural districts. It should be placed over a pit and boarded up tight in the rear.

may be cut in each end of the seat box and *carefully screened*. As this will admit light to the pit and induce flies to enter, the trap lid covering the hole in the seat should be kept in good order. Unless there is a strong demand for these two screened vents in the seat box they should never be put in. On account of their position, their exposure to dampness and liability to rust, they should be rescreened every year. Vents on opposite ends of the seat box give better ventilation and cost less than a vent on one end and a box or flue extended from the seat box to the roof on the other. The ventila-

tion should be kept closed at all times by means of a spring hinge.

Such a privy as this should be located at least 200 feet from any well or spring, and also, if possible, on lower ground, or where the drainage from such a privy is away from the well or spring. Care should also be taken to prevent surface water draining into the pit, as this may cause it to cave in, and it also increases the odors given off.

The chief objection to a privy of this kind is on account of pollution of the ground water, but we must bear in mind that where such pollution has

to pass 200 feet or more through the ground to a well, there is less danger than where it enters the well from the top in any of the many ways familiar to sanitarians.

Of course, such a privy is a rather crude arrangement. Later experience may indicate a better plan, but we believe it is a great deal better than the open-back privy. Open-back privies give chickens and domestic animals access to the filth deposited on the surface of the ground, whence it is frequently washed and scattered far and wide, exposed alike to flies and barefooted children. This is where we get practically all our hook-worm disease and a great part of our typhoid, diarrheal diseases and summer complaint. Such conditions are but little better than no privy at all.

Such privies could scarcely be recommended in towns, even in the thinly populated outskirts of a town, where the cost of water and sewers makes such things out of the question. In such cases we believe it is better to collect the fecal matter in water tight galvanized iron pails, to be removed by the scavenger at regular intervals. Such privies are described elsewhere in this bulletin.

CHARLEY CALLOW

How the Law Taught Him Sanitation

He was well-dressed and looked passably intelligent, and was smoking a cigarette and spitting copiously upon the rear platform of the car. The sign read: "Spitting on the floor of this car is unlawful. Two dollars fine." The health officer touched him on the shoulder and pointing to the pool of spit said: "Don't you know spitting on the floor of cars is unlawful?" The callow one indignantly said, "You're a crank." The officer said, "You are nasty and a law-breaker." The cigarette sucker said, "'Tend to your own business, you crank." Being reminded of his business the officer attended to it. Before the judge Charley Callow showed no indignation and never said crank once. In the big record book on the judge's pulpit was this entry: "Charley Callow, for spitting on floor of street car. Fine \$2.00, costs \$7.50; total \$9.50." Charley is now known as "Charley the Spitless."

Moral: When Charley pays two dollars for spitting, he just won't spit.—
Indiana Health Bulletin.

A STUDY IN ADVERTISEMENTS

Collier's Weekly picked up the two following advertisements, which appeared in the Newark (N. J.) *Evening News* four days apart. They make an interesting comparison.

ALEXANDER the Great drank beer and conquered the world before he was 32. Perhaps he could have done it sooner if he had not drunk beer, but you'd better take no chances

PON

FEIGENSPAN

Alexander the Great drank beer and conquered the world before he was 32. Perhaps he could have done it sooner if he had not drunk beer, but you'd better take no chances.

(Brewery Advertisement in News
January 24th.)

ALEXANDER the Great died in a drunken debauch at the age of 33. You'd better take no chances.

Anti-Saloon League of New Jersey.

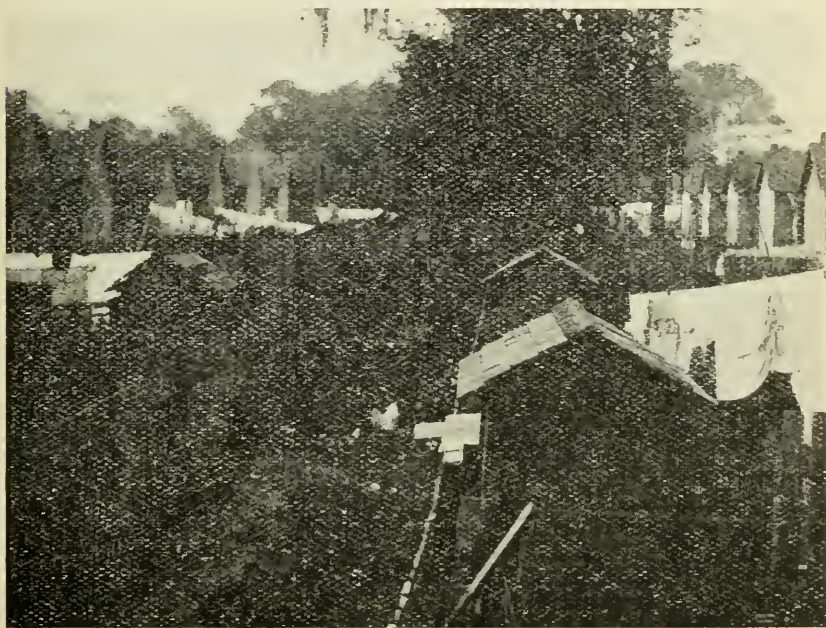
CITY PRIVIES

A Practical Design for Sanitary Privies for Urban Use

WARREN H. BOOKER, C.E.

Elsewhere in this bulletin we discussed the question of privies in the country. The privy question in the country is quite different from that in towns. In the country, in many places, there are no privies at all, and those that are (or are not) affect, as

lar education must be depended upon to encourage the best privy possible under the circumstances. It is unreasonable to expect regular, careful attention to privies in rural districts, while in cities regular scavengers can be required to look after such things.



HOOKWORM ALLEY.

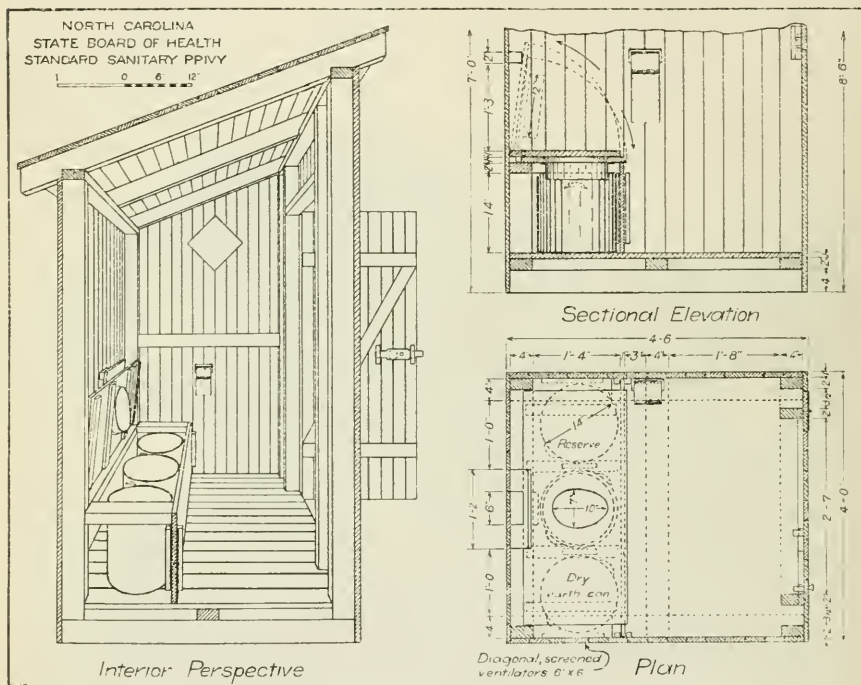
What an elegant chance for chickens, children, flies, and domestic animals to spread infection from these old open-back privies. Such communities are almost sure to have high death rates.

a rule, only one family. In cities there is always some form of privy available where water and sewer connections are not to be had, and, in general, flies and drainage from insanitary city privies affect the community rather than the single family. Again, in cities, ordinances can be passed requiring certain standards for privies. Not so in the country. There, popu-

Of course, where water and sewer connections are available, no privies of any kind should be tolerated. Even the best privy is a poor substitute for sewers. We must admit at the outset, however, the stern fact that in small towns and in the suburbs and outskirts of cities it is even more impracticable to think of serving every householder with water and sewer connections

than to expect them to install the \$20 to \$50 sanitary privy arrangements we used to recommend. In view of satisfactory experience in the suburbs of cities and towns and in cotton mill communities, where water and sewer connections were out of the question, we know of no better form of privy than the one here shown. In

should have a lid, and it may be provided with screened ventilators at both ends. It should be part of the scavenger's duty to see that the seat box is always kept fly-tight. *There should be no back door to the privy.* It is too small a house for two doors, and, besides, this back door increases the danger from flies a hundred fold.



SANITARY PRIVY FOR CITY USE.

The fecal matter is collected in cans and removed through the front door at least once a week. Sanitary privies must be flyproof and water tight. Note the absence of back doors.

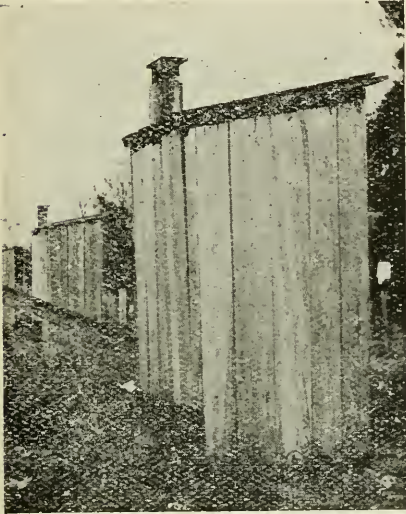
such cases regular scavenger service should be employed, and sufficient uniformity required so that a standard interchangeable set of cans owned by the city can be used.

The essential feature of this form of sanitary privy for cities is that, instead of depositing the fecal matter in a fly-proof pit under the privy, as in the case of rural privies, it is deposited in cans inside the seat box and removed at regular intervals. *The seat box should be made fly-tight.* It

When back doors are used, they are nearly always left open, or they become broken or are knocked off altogether. Without back doors, privies can be placed close up against back fences or against other buildings, and, furthermore, the scavenger can not remove the can while the privy is in use.

Some towns require a special box form of ventilator at one end of the seat, extending up through the roof, and a screened opening at the other, but these are a little more expensive

and harder to build, and, as a matter of fact, they do not ventilate as well as screened openings at both ends of the



OLD OPEN-BACK PRIVIES CLOSED UP.

These privies are now provided with pails which are removed from the front and the backs which are weatherboarded up fly tight. They illustrate an easy way of remodeling existing privies.

seat box. There is no draft in these chimneys, because there is no stove or fireplace to furnish hot smoke and expanded air.

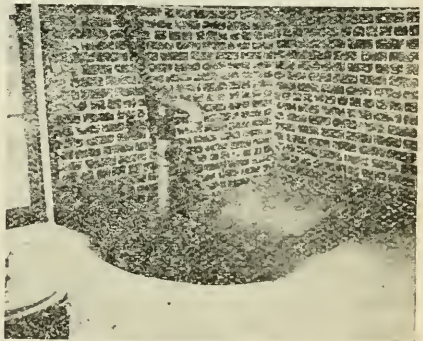
REMODELING OLD PRIVIES.

To make a sanitary privy out of an old open-back privy, all that is necessary is to make the back of the privy fly-tight by weatherboarding it, put in a floor or fill up under the privy with earth until a heavy galvanized iron can at least fourteen inches high and fourteen inches in diameter can be placed close up under the seat, and then fasten the seat top by means of hinges so that it may be raised like a lid and the cans removed and replaced from the front. Such alterations usually cost from about fifty cents to two or three dollars per privy.

An effort should be made to have the entire privy made as nearly fly-proof as possible. Besides taking the

precaution of having a trap door over the hole in the seat, the openings in the sides of the privy near the top should be covered with glass, and the door should be kept closed at all times by means of a spring hinge. In the accompanying cut are shown several old open-back insanitary privies which have been remodeled and made sanitary at very little expense. The chimneys on these might well have been omitted, but the cut illustrates the method of excluding flies and animals from the fecal matter.

Sanitary privies in cities contemplate regular scavenger service. The best plan is to have a scavenger with a platform spring wagon make regular weekly collections, replacing the filled or partly filled cans with empty cans. Such a method is shown in the cut on the next page. The cans taken from the privies are hauled to a sewer opening or specially constructed man-hole, which in this case was made in a corner of the brick building just beyond the wagon. This opening into the sewer is shown in the small cut below, together with the small hand hose used in washing out the cans. By

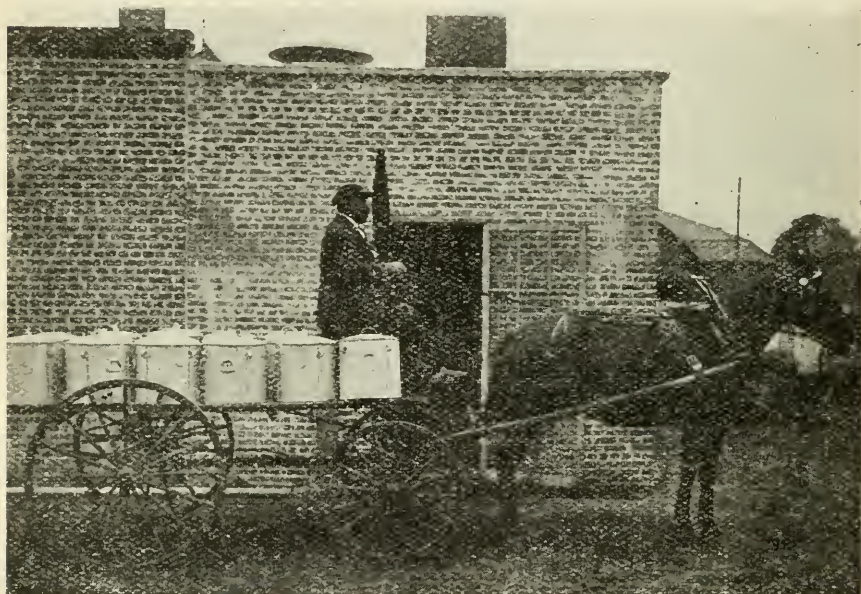


Sewer opening into which cans are emptied. By means of small hand-hose cans are rinsed out clean. using water tight cans the fecal matter and urine is always in liquid form and easily emptied from the cans. By means of the small hand hose the can can be easily rinsed out, and, if de-

sired, two or three pints of water and a small quantity of kerosene oil (about a half teacupful) may be poured into each can before the cans are replaced. The scum of oil floating on the liquid has a tendency to prevent much of the odor, although there is very little real damage done by odors.

The use of chemicals, disinfectants, germicides, and all that expensive

high if the cans are placed on the floor turers of heavy galvanized iron cans for use in privies. We have corresponded with several companies making such cans, and find that standard 26 gauge galvanized iron cans, 14 inches high by 14 inches in diameter, cost, without lids, about 50 cents apiece in hundred lots. Cans much larger than 14 by 14 raise the seat too



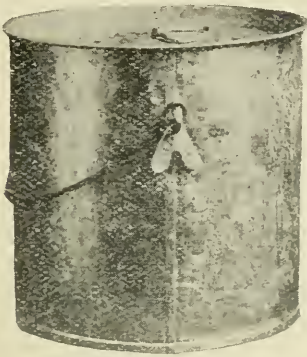
Scavenger wagon with load of privy cans. These cans are emptied into a sewer opening inside the building opposite.

and more or less vile smelling family of deodorants is usually just so much money thrown away. In the first place, they rarely ever kill all the germs; in the second place, if the privy is made fly-tight, there will be little need for disinfection if such were practicable; and, in the third place, there is practically no harm in the odors themselves. Furthermore, such chemicals cost a great deal of money that individuals, as well as cities, might use to much better advantage for health purposes in other ways.

This office is frequently in receipt of requests for the names of manufac-

of the privy. Furthermore, large cans are more expensive, harder to handle, and not necessary to hold the excreta from even a large family for a week. Nothing lighter can 26 gauge should be used, while 24 gauge will be found much more serviceable and perhaps cheaper in the long run. These cans can usually be secured through local hardware dealers, or from the Wheeling Corrugating Company, Chattanooga, Tenn., the American Can Company, Atlanta, Ga., or from the National Enameling & Stamping Company, Baltimore, Md. We mention these three companies as thus far they

have quoted the best prices on such cans. If other companies care to quote prices on cans, or be mentioned in this connection in correspondence and in the Health Bulletin hereafter, we should be glad to hear from them.



A GOOD FORM OF PRIVY CAN.

These cans should be 14 inches high by 14 inches across. The lid should fit down into the can $1\frac{1}{2}$ to 2 inches. Such cans made of 26 gauge galvanized iron without lids, cost about 50 cents each in hundred lots.

Authorities of cities and towns contemplating installing sanitary privies should also write the State Board of Health for their special bulletin on the sanitary privy, which contains suggested ordinances requiring the use of sewers where water and sewer connections are possible, and also the use of sanitary privies where such connections are not possible.

Good Eyes Pay

A San Francisco school teacher had as one of her pupils a boy that was both stupid and incorrigible. He played hookey, lied like a trooper and resisted all efforts to give him instruction of any kind. Finally the teacher noticed that the boy's eyes were bad, and sent a note to his parents to have them attended to. No attention was paid to the teacher's request and the boy grew more and more refractory and unmanageable. Finally the teacher took him to an oculist and had his

eyes fitted with proper glasses. The transformation in the boy's manner and habits was little short of marvelous. He seemed for the first time to be able to see things right. He soon became one of the brightest and best pupils in the school, standing at the head of all his classes. It was found that because of defective vision it had been next to impossible for him to see print at all, and that his ludicrous attempts to answer questions in his recitations excited the laughter and ridicule of his classmates, with the natural result that he hated school and everything connected with it. But when his vision was restored he became a changed boy, voluntarily giving up bad habits and soon winning the reputation of being one of the most studious and best behaved boys in the school—and one pair of glasses saved the boy.

Stand Up Straight and Avoid Tuberculosis

The first essential in the avoidance of tuberculosis of the lungs, or consumption, is to keep the lungs strong, so that if the germs are breathed they can do no harm. One of the most important things in keeping the lungs strong is to keep the chest wide open so that the lungs can be properly used. If the body is drooped or stoops, or if the shoulders are allowed to drag forward (round shoulders), or if the head is carried forward instead of well back over the shoulders, the chest must be flattened, the breathing must be shallow, and the lungs, not being freely used, become weak. It is in this type of chest that tuberculosis usually begins. The consumptive is usually narrow-chested, with drooped shoulders and with the head craned forward. While the development of a strong, well-formed chest is one of the most important factors in preventing tuberculosis, the same

thing is to be desired if the disease has once started. Not only should we live in the open, but we should stand up straight and learn to "throw a big chest," so that the lungs can grow strong and the fresh air be taken in. The runner, the singer, or any one who is obliged to make sustained effort is taught to stand and sit with chest high so that the lungs can be used to the best advantage, and if every one would do the same thing there would be less tuberculosis because there would be fewer weak lungs.

Insist on Wrapped Bread

If you buy baker's bread, make a kick if they don't give you bread already wrapped at the bakery. It costs less to wrap it in wholesale fashion at the bakery while it is fresh than it does for each grocer to hunt up a string and piece of paper every time he sells a loaf. Furthermore, wrapped bread does not have an opportunity to dry out and become stale nearly so rapidly as unwrapped bread. The chief reason, however, for having bread wrapped at the bakery is to avoid the contact with dust, dirt, flies, dirty hands, dirty baskets, and so on.

People buy bread because it is a wholesome, nutritious, easily digested, economical food. They are willing to use bread made outside their own kitchens when they are satisfied that the process of making it is carried on under conditions about as good as those prevailing in their own kitchens under their own eyes. The cordwood way of distributing bread—stacked up in a fly-abounding salesroom, stacked up in an open wagon stacked up on the arm of a delivery boy, stacked upon the floor of the back-porch until some one finds it and takes it in—prevents many a woman from buying bakery bread, and it should prevent more from doing so.

Recently bacterial examinations were made in Chicago of wrapped and

unwrapped bread. Of the unwrapped bread it was found that at least 39 per cent of the loaves had an average of 14,000 bacteria on them. Such loaves were classed as "dirty." Nearly 39 per cent more of the loaves examined showed an average of at least 4,000 bacteria and were classed as "fair"; while but 27 per cent of the loaves could be called clean, with an average of 2,500 bacteria.

Of the wrapped bread, 45 per cent was found to average only 848 bacteria, and 55 per cent averaged only 371 bacteria. In other words, according to the bacteria found, unwrapped bread has from seven to twenty times as much dirt and filth on it as wrapped bread.

Not Even Advertising

Printers' ink is the life and soul of patent medicine and other frauds. When once the newspapers and magazines stop advertising these fakes about four-fifths of the danger to the public will be removed.

We are just in receipt of a very significant letter as regards the effective way in which one fraud was successfully prevented from advertising; namely, by showing it up to be so rotten that papers and magazines did not dare to advertise it. The following letter is very brief and to the point:

State Board of Health, Raleigh, N. C.:

GENTLEMEN:—You certainly did put the quietus on the Oxyphor fraud. I have not seen their advertisement in any paper since your exposure in the Bulletin—and I hope our church papers at least have been put to thinking. Fine work. Keep it up.

Yours truly,

Printers' ink is the life and soul of patent medicine and other frauds. When once the newspapers and magazines stop advertising these fakes about four-fifths of the danger to the public will be removed.

Hogs in Towns

Foul, fly-breeding hog pens within corporate limits of cities and towns are getting out of date. The folks simply will not stand for them any longer, and they are right. They are not going to stand for flies bred in horse stables much longer, and when it comes to pig-sty flies, why we simply draw the line at that. It will not be long before every North Carolina town that is on the map at all will not only have no hog pens at all, but it will have some other strict anti-fly rules and regulations.

The Clayton *News* hits the nail right square on the head when it takes the following stand:

"Now that spring has opened and warm weather is soon to appear, would it not be well to investigate the old 'hog pen question' in Clayton? Can we afford, for the value of a few fat pigs next fall, to risk chances on having one case of typhoid fever in our otherwise healthy town? We think not. And, besides, ground is too valuable to be used for raising hogs. Let's leave that for our farmer friends, who have plenty of room and are better situated for this kind of business. The cost of one case of typhoid fever in money would amount to far more than the profit on all the hogs that will be fattened in Clayton this year. Let's not have them this year. They are not worth the trouble and worry."—*Clayton News*.

Of course, we do not mean that hog pens cause typhoid fever directly, but we do mean that they breed vile odors and flies, and the latter carry not only typhoid from the sick to the well, but also diarrheal diseases (summer complaint) among babies, and many other diseases.

You would not think of having tiny bits of manure and worse filth lying around in your house and on your table, yet you have flies, and think where they come from and what may be on their feet.

Two Meetings that May Interest You

Many of our readers will be interested in the two meetings to be held in Memphis, Tenn., from May 6th to 15th. The Southern Sociological Congress meets from May 6th to 10th, while the National Conference of Charities and Corrections will hold their meeting from May 8th to 15th. These two great meetings of social workers have purposely been arranged to overlap. Different phases of social work will be taken up by the different sessions during the three days in which the two organizations are meeting at the same time, so that little or no conflict or confusion will result to those interested in different lines of social work.

These two organizations, national and sectional in character, cover in a broader way what our own State Conference for Social Service covers in North Carolina. Some of the matters discussed will be public health, child welfare, defectives, community development, public charities, prison reform, and other similar questions. For full information and programs, those interested should write to The National Conference of Charities and Corrections, 315 Plymouth Court, Chicago, Ill., and to The Southern Sociological Congress, Nashville, Tenn.

Cough and sneeze on the Q. T. Get behind a handkerchief when you do it. The other fellow doesn't want your germs coughed out and sneezed at him, any more than you want his.

Now, let us keep the city clean,
 Let's keep the swatter nigh,
 Be ever alert for filth and dirt,
 And swat the nasty fly.

WHERE IGNORANCE IS DEATH

By ALICE MAVOR EDWARDS, Monrovia, Cal.

He was not the kind of a man to figure in romance; only a plain middle-aged machinist who had done his day's work since he could remember with hearty thankfulness that there was work to do. Plenty to eat of a sort, school books for the kiddie, and the rent paid every month. He and the woman had managed that.

One day he began to cough. The atmosphere was heavy in the shop. With close moist air, fatigue, and the shock of draught upon unprotected shoulders—yes, one easily caught cold and, having once caught it, too easily kept it. So he coughed, all winter, all spring, and—it had never hung on quite so long before—all summer and all winter again.

Then he noticed that he was not working with his old vigor. Coughing tired him. It was becoming too much trouble to eat after a day's work. He would come home at night, fling himself upon the couch and fall into a numbing sort of slumber, only to be wakened by the cough which shook him more harshly at each paroxysm. Still, a man does not go to a doctor when a call means two days' wages, or a lay off from the chief business of life. Instead, he coughs on. For four years John Jones coughed on, lost flesh, and worked without ambition and with ever-increasing weariness. Then the drop came.

The physician looked at him sharply. He was panting and trembling with the fatigue of a few stairs' climb. The physician knew what the short breath, the feverish lips, the abnormally bright eye and that incessant cough meant. He was not a brute. He was only a busy and harassed man whose hours for eating and sleeping had been

reduced to improper fractions by the demands of just this sort of thing. There was the formal examination, of course, the weary man's bewilderment growing with each new test, then—

"Consumption, man!"

The doctor did not hesitate to use the old-fashioned term for the disease now known under a more euphonious title.

"Quit work at once. Go down to Arizona and live in the open air—your only chance. People get well there."

And he bowed the stricken man out of the door with a throb of pity for the twitching lips and anguished eyes.

John Jones was not the kind of a man who thinks or acts quickly. It had become easier to do things slowly in the past few years. And he was tired now—very tired. He found it hard to board the car at the corner. He scarcely noticed when the conductor called his street and roughly urged him to hurry as he hesitated with a foot on the running board.

Consumption! That was what the doctor had said of Brown who had worked next to him for years, and who died there in the shop of sudden hemorrhage one day only a few months since.

Quit work! Why, he'd worked every day, always—Sundays, too, most of the time—a full, clean day's work. A man might be tired; he might cough; but he must work and work hard when there were Mary and the growing kid. Quit work! Who paid the bills when a man quit work?

Arizona—where was that? He had heard of it remotely, as he had heard of Patagonia or Siberia or the Klon-

dike. He must go, of course, if the doctor said, for the doctor knew. People got well there, and he must get well. The fight was hard enough when a man was strong. How did one get to Arizona? How—

He ran across Casey here. Casey belonged to the bunch that met sometimes for a glass and a smoke and a social game together at "Mike's"—only once in a while, though. Casey was fat and red of face and had all the insolence of health.

"Hard luck, old man!" His hearty slap upon the thin shoulders made his companion wince, but Casey did not see that. "Got to go, have you? We'll see if the bunch can help a little. Don't get fussy." And terrified at the sight of any sort of human emotion, and even more embarrassed at a display of human gratitude, Casey was off.

The "bunch" had helped; the boss and the boys at the shop had helped. They had been glad to give but they had not much to spare; and it was no small source of pride to them when they had collected just exactly seventy-five dollars.

Mary could sew enough afterwards, she said; he was not to worry.

And now he was in the day coach for his four day trip, his lunch in a big basket beside him. One could not afford a sleeper when tickets cost so much.

Who would believe that it would cost so much! He had not known before how desperately weary he was. It was hard to breathe with the motion of the train which shook the piteously thin shoulders. The coal dust made one cough more raspingly, too. To eat was an effort—why eat, when a man was so tired?

Hunched into a corner of the seat he sat, a pitiful, broken-chested, shivering creature, hot fever touching his cheeks with livid color. He had tried to eat one of the sausage sandwiches which Mary had so carefully packed in with

the cheese and doughnuts. A few soiled handkerchiefs and cloths lay about the floor and in the rough plush seat, laden with death-dealing mucus for the next occupant. John Jones was not an uncleanly man. But when one coughed so hard and so long, it was not always easy to be careful. The porter would not bother. John learned that when he called to him one morning, dizzy with that dreadful nausea from the car motion. "The company didn't have anything to do with 'lungers,' there ought to be a law to prevent their riding at all."

If only he dared ask for a drink now. But perhaps he could reach the cup himself there under the water cooler. It was hard to move, harder still to stagger up the lurching aisle. But the water which he drank in gulps of thirsty gratitude from the common cup was most refreshing. Of germs he had not heard. Of infection he did not dream. The doctor had not said.

He pulled himself back to the seat and settled down again into his corner, shaking and spent with the effort.

It was there that I found him as I was passing through from the Pullman. There was little to do, but he seemed grateful that anyone should have the inclination to chat with him. It was lonesome, he said, and he was tired. He talked of Mary and the kiddie and of some of the things he hoped to do for them when he was well—in Arizona, he would get some light job right away, then Mary need not work so hard. He would be rested after he got off the train. People always got well there.

His hungry look as we passed the depot lunch house at a little way station sent me out to get a cup of coffee for him. I came back to find a hushed compartment, a Negro porter gray with superstitious terror plucking at a shriveled inert heap where John Jones had lately sat.

And at home Mary was sitting half-heartedly picking at a bit of unfinished sewing, waiting to hear of a safe arrival. Loneliness had grown less endurable with every hour. Anxiety had made the days a dragging suspense, the nights a prolonged terror. It had been hard to let him go. But the doctor had said—

What was it the doctor had said?

The doctor had said just enough to send a man with the sentence of immediate death upon him a torturing journey of two thousand miles away from such friends and comforts as he possessed. He had gone with no knowledge of the disease he was combating, no resources for caring for himself in a strange country, no thought of the precautions necessary for public safety.

Three sufferers from the effects of John Jones' wretched and ill-advised journey—John, Mary, the public. But how are John and Mary and the public to know better?—*The Survey, January 10, 1914.*

Our Respects to the Fly

It is said that the fly serves no good purpose. It is a mistake; he performs two very good services. He teaches the teachable to clean up and keep clean, and he kills off the others. That is, he assiduously works to cause a survival of the fittest.

Let us give the———, that is, the fly, his due. While we give him credit for this much good, let us be among the teachable.

Let us see that nothing around our premises breeds flies. Let us shun the presence of flies in the house as we would shun poison. Let us screen effectually our doors and windows, so as to avoid stray flies, and let us kill every fly that gets inside the sacred inclosure.

It is wiser to do this than it is to call the flies unkind names while they

swarm around our dining table. It takes a little more trouble, but it is more pleasant, and it is safer. Especially if there is a baby in the family the fly is dangerous. Funerals are expensive, and then we would miss baby.

The fly is an undesirable guest. He contaminates every particle of food he crawls over. He comes fresh from the privy, or the manure pile, or the decaying heap, where he takes his first feed. Then he takes his dessert from the food you are to eat, and he does it without first wiping his feet. If you could see with a microscope what he leaves, it would make you turn pale, and you would make more energetic efforts to keep him out of the house, and if possible you would stop his breeding.

While you honor the fly for killing off the unfit, see to it that he does not get you into the wrong class.—*Life and Health.*

The Trademark of Ignorance

"I don't blame my mother, because doubtless she thought she was protecting me when she would not have me vaccinated. Many a time I have heard her say that virus was filthy and would give me scrofula. I knew no better and grew up to manhood unvaccinated. While I was on the road, ten years ago, I stopped over night in a town where there was an epidemic of so-called 'chickenpox,' very mild, they said, and harmless. I went home and in two weeks developed smallpox in its virulent form. For three weeks I suffered the tortures of perdition, and when I was well again my face was fearfully pitted, as you see. The scars are bad enough, heaven knows, for they disfigure me for life, but I hate them still more for another reason. Why? Because they brand me for life with the trademark of ignorance and useless suffering."—*Virginia Health Almanac.*

Blame It on the Liver

Cheerfulness and a sluggish liver can't exist together in the same man. Although it might not perhaps be correct to say that the morbid states of mind have their origin in the liver, they are unquestionably, in many instances, accompanied and aggravated by derangement of this organ; and it is equally true that, independently of either hypochondriasis or melancholia, persons with "sluggish liver" are subject to fits of great depression of spirits and often groundless fears of impending danger which cease when the liver is restored to its normal state.

Irritability of temper is another common symptom of a sluggish liver, and is sometimes the first indication of anything wrong. A man who has previously borne the crosses of life with equanimity and been amiable to those about him, gradually becomes disconcerted by trifles; his mind broods over them, and he makes all around him unhappy, and himself the most miserable of all.

His relatives frequently put down his "grouch" to something mentally or morally wrong; but in nine cases out of ten it is to be traced to a sluggish liver. To overcome the difficulty, stop eating for a day or two, take exercise (horseback riding is the best) and if necessary a few doses of a good saline laxative.

If you are not cheerful in a few days consult your family physician.—*Exchange*.

Learn and Live

Lack of information is responsible for no end of the burdens humanity is called upon to bear. Infinitely more dangerous than a want of information, however, is the possession of a great fund of misinformation. Ignorance keeps people from doing what ought to be done. False information leads

people to do what ought to be left undone.

One of the great forces which keeps contagious diseases with us is the false notion that "children are better off to catch the various contagious diseases of childhood, and have them over with." There are people who, with the best intentions in the world, still willfully expose their children to contagious diseases. These people are, in large measure, responsible for keeping germ diseases alive. Disease germs are parasites which feed upon human blood and tissue. A few years starvation would drive them out of existence.

So long as there is a neighbor who cultivates thistles, dandelions, etc., in his fields or lawn, it is well nigh impossible for the careful, industrious neighbor to secure the freedom he pays for by his own care. Parents have a right to insist that their children be not contaminated by a careless neighbor's children.—*Collier's*.

The windowless room is a curse to civilization and should not be occupied by either man or beast.

Through domestic science courses in public schools, we are laying the foundation for healthier people in the future—healthier because they will have learned how and what to eat.

Some people object to change and reform as a matter of principle. That is why so many school pupils are still forced to use the old roller towel and bar soap instead of the individual paper towel and clean liquid soap.

There are but three animals that habitually use tobacco—the rock-goat of Africa, whose stench is so insufferable that no other animal can approach it; the tobacco worm, whose intolerable visage gives every beholder a shudder; and the third animal—who is he?

TWO MILK ROUTES. WHICH FOR YOU?

DIRTY—MILK—CLEAN



